

# WORLD'S FINEST ELECTRONIC SURPLUS

## 37TH



TH

1947 1984

**CATALOG WS-84**  
**MANY NEW ITEMS**  
**CHECK EVERY PAGE!**

ORDERING  
INFORMATION  
SEE PAGE 2

MINIMUM  
ORDER \$5.00

# Fair Radio Sales Co.

P.O. Box 1105 - - 1016 E. Eureka St.

Lima, Ohio 45802

419/223-2196

419/227-6573

CATALOG  
INFORMATION

This IS the only  
catalog we will  
issue this year.  
A supplement will  
be sent in the Fall.

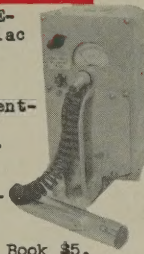
### HEWLETT-PACKARD SCOPE



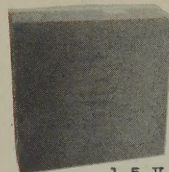
HEWLETT-PACKARD OSCILLOSCOPE, general purpose unit with 500 KHz bandwidth on all ranges plus 0.2 mv/cm sensitivity for X and Y amplifiers making it especially useful for phase measurements. Sensitivity 0.2 mv to 20 V/cm over 16 calibrated steps in 1-2-5-10 sequence and vernier to 50 v/cm. Sweep 1 usec to 5 sec/cm in 21 calibrated steps; vernier to 12.5 sec/cm. Also 350 Hz squarewave calibrator, X2/X50 magnifier, auto triggering, beam finder. Input 1 megohm shunted by 45 pf. 115/230 VAC 50-1000 Hz; w/partial repro manual. 7x16x18, 38 lbs sh. Used-repairable \$145. Checked \$195

### PDR-27 RADIAC SET

AN/PDR-27 PORTABLE RADIATION DETECTOR consisting of DM-74 radiac meter and DT-53 detector probe with BS-1 Geiger-Mueller tube. Meter indicates amount of beta and gamma radiation in milliroentgens per hour. Range scale for 0.5, 5, 50, and 500 M-rtns/hr. BNC connection for headset monitoring. Uses batteries (not available) which must supply 135 VDC, 22.5 VDC, and 1.5 VDC. 8x6x12, 15 lbs sh wt. Used, \$29.95; Transit case \$6. Book \$5.



### BA-279 BATTERY PACK



BA-279/U BATTERY, intended to power AN/PRC-8-9-10 or Canadian PRC-509-510 backpack transceivers. However, pack can be readily disassembled to utilize the different cell voltages for other power uses. Cell outputs: 1.5 V 675 ma (A1), 1.5 V 250 ma (A2), 1.5 V 250 ma (B1) +135 V 50 ma (B2), and 6 V 400 ma (C). Batteries have 2/79 dates and have been in cold storage thru 3/84; not rechargeable. 8x8x12, 7 lbs sh. Unused, \$8.95 each; Case of 12, \$80 \*\*\*\*\*  
BA-4386 LONG-LIFE MAGNESIUM BATTERY for backpack radios AN/PRC-25-77; output (as supplied to PRC-25-77): 12.5 VDC 600 ma (receive), 12.5 VDC 1.4 amp and 3 VDC 400 ma (transmit) Estimated battery life: 30 hours 9:1 R/T ratio. 4/80 date code; cold storage thru 3/84. 3x9x2, 3 lbs. Unused \$6.95; 8/\$40.00

### R-2174 VLF RECEIVER

R-2174/URR VOLTMETER-VLF RECEIVER, Rycrom frequency selective voltmeter used by gov't as 0.3 to 420 KHz AM-LSB-USB receiver. Six bands; selectable bandwidth 0.1-3-10 KHz. Built-in VTVM has full scales 0.0003 to 30 Vrms in 11 ranges, 3-10-30 sequence; -70 db to +30 db, 10 db steps. Also 135-600 ohm-Bridge unbalanced and balanced select, speaker, and phone jack. Requires 115 VAC 60 Hz; 9x19x7, 25 lbs. w/partial repro book. Repairable \$125. Checked \$195.



### OPERATOR HEADSET



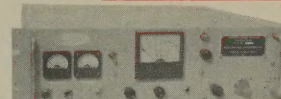
WESTERN ELECTRIC TYPE 52 OPERATOR'S HEADSET w/BOOM MIC, lightweight set has single receive element of approx 150 ohms DC resistance; mic on 8' boom 50-70 ohms DC res. 5' cord w/dual FI-55 style plug (WE396A). Looks like a good headset for various intercom situations; 2 lbs sh. Used-excellent \$17.

### R-390A/URR HF RECEIVER

R-390A/URR RECEIVER famous military set covers 0.5 to 32 Mhz AM-CW-MCW in 31 one Mhz bands read directly on mechanical digital counter. 455 KHz final IF; has four Collins mechanical filters allowing 2-4-8-16 KHz selectable bandwidth. Calibration points every 100 KHz; also BFO, AGC, dial locks, 600 ohm audio out, Line and Carrier Level meters. Rackmount; no covers; requires 115/230 VAC 60 Hz. 10x19x16, 95 lbs sh (UPS in 2 pks or MF). Used-repairable, \$325. \$215. Checked \$450 \$335. Manual, partial repro \$15.



### SSB CONVERTER



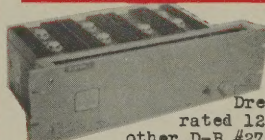
CV-1982/TSC-26 SINGLE SIDEBAND CONVERTER for receivers having final IF's of 455 KHz such as R-390 and SP-600. Features 3" square -20-0-+3 VU meter and 12" sq carrier and subcarrier meters. Has dual function switch Meter RTO Center-AF Out and Monitor AF Out-AFC PIPS; also switches Direct-Inverted (USB-LSB) Spectrum Translation, AF Gain, AFC, Tune. w/nuvisters 7586, 17/7587, 7895, 4/8056. Requires 115 VAC 60 Hz; 5x19x16, 29 lbs. Used-repairable \$155

### ANTENNA COUPLER



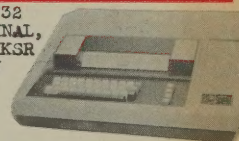
CU-1638/GR SOLID-STATE ANTENNA COUPLER, allows use of upto six receivers in the 2-30 Mhz range on the same antenna. 3 db gain; 7 db max noise figure. 50 ohm input and output impedances. Includes 500 microammeter to monitor channels, "N" connections, shunt and series lightning protection. Requires 115/230 VAC 50-60 Hz; 3x19x9, 15 lbs sh. Unused w/book, \$59.50

### 12 VDC 4/8 AMP SUPPLY



PF-4887/UGA-8 SOLID-STATE POWER SUPPLY, consists of two independent modular power supplies: one Dressen-Barnes #27544 rated 12 VDC 8 amps out; the other D-B #27543 rated 12 VDC 4 A. (Info included to modify for 10-15 VDC out.) Terminal for + or -12 V out. Requires 103-127 or 206/254 VAC 47-400 Hz. Front has fuse and On-Off switch. 5x19x8, 36 lbs. Unused \$49.50  
D-B #27543 12 V 4 A modular supply only, \$25.  
D-B #27544 12 V 8 A " " " " \$38.

### TI 732 DATA TERMINAL

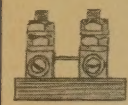


TEXAS INSTRUMENTS 732 ELECTRONIC DATA TERMINAL, a Silent 700 Series KSR unit intended for TTY communication using five level Baudot code, 20 ma neutral current loop. Send-receive selectable speeds of 50, 75, and 100 baud (6.67, 10, or 13.33 cps). Upper case only 37-key standard format keyboard has 55 printable characters and five print functions. Printer has solid-state printhead with 5 x 7 dot matrix heating elements; uses 8x10 thermal paper allowing for quiet operation. Provision for adapting to RS-232C interface or acoustic couplers. Requires 115 VAC 60 Hz. 6x20x19, 45 lbs sh. Unused w/book, \$185.00  
THERMAL PAPER 7/732, 300' roll. \$11. 3/\$30.



# FAIR RADIO SALES CO., INC.

1016 E. EUREKA, BOX 1105, LIMA, OHIO 45802  
TELEPHONE: AREA CODE 419 227-6573



## SHUNT

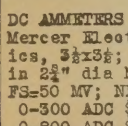
50 mv. 15 AMP  
SIZE: 2x1x1/2  
6625-810-6742  
UNUSED \$2.50

FS-50 UA w/  
mirrored  
scale, zero  
adj. Scale:  
4.0-20.0 GMS  
% HEMOGLOBIN.  
Mount on panel  
front or  
behind. Fits 2 1/2" dia. hole.  
5 1/2x6x2; Beede mfg., \$7.95

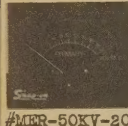


CALBIOCHEM  
meters, FS-50 UA  
2-3/8" square.  
Used, \$4.95  
#200037, 0-150  
-350% GLUCOSE  
scale.

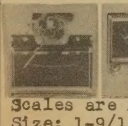
#200039, 0-.3% BLOOD ALCHL.  
#200056, 4-24% HEMOGLOBIN



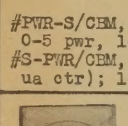
DC AMMETERS by  
Mercer Electron-  
ics, 3 1/2x3 1/2; fits  
in 2 1/2" dia hole.  
FS-50 MV; NEW.  
0-300 ADC \$7.95  
0-800 ADC \$7.95



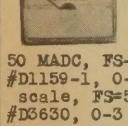
0-50 KV DC &  
0-20 VDC scale  
FS-1 MA DC;  
4 1/2x4 blk face.  
Mercer Elec  
mfg. NEW  
#MER-50KV-20V, \$25.95 \$4.95



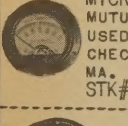
CB METERS  
clear  
plastic  
w/black  
scales.  
Scales are not linear.  
Size: 1-9/16" sq. NEW \$2 ea



#PWR-S/CHM, as above but  
0-5 pwr, 1-9 S-units.  
#S-PWR/CHM, FS-200 ua (75  
ua ctr); 1-9 "S", 1-5 pwr.



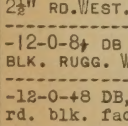
CLEAR PLASTIC  
METERS, 2-3/8"  
sq. fit 2-1/8"  
dia. hole. EMI  
mfg. Unused.  
#D1145-2, 0-5  
50 MADC, FS-5 mado, \$4.95  
#D1159-1, 0-50-500 MADC  
scale, FS-50 mado, \$4.95  
#D630, 0-3 VDC, \$4.95



MICROMHOS DYNAMIC  
MUTUAL CONDUCTANCE  
USED IN 1-177 TUBE  
CHECKER BASIC 0-1.4  
MA. HICKOK #M547A  
STK# 3F1350 \$4.95

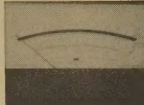


TV-2 REPLACEMENT  
METER, 0-250  
SCREEN VOLTS,  
FS-1 MA. 2 1/2" RD.  
SEALED. NEW \$5.95

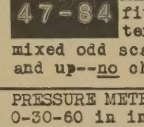


DECIBELS  
-10-0-64 DB 6MW 600 OHMS  
2 1/2" RD. VEST. 2837 \$4.95  
-12-0-84 DB 100 UA=FS 3 1/2" RD  
BLK. RUGG. WAC4586 N \$7.95  
-12-0-48 DB, FS=100 ua, 3 1/2"  
rd. blk. face. Used, \$5.95  
-20-0-34 DB FS-199 MUA 2 1/2" R  
#GA50934 USED \$4.95

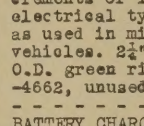
OTHER VALUES IN STOCK, WRITE  
POWER SET +6 TO 0 TO-3  
2 1/2" RD. FS-200 UA, WAGLINE  
1496/400 RUGG/SEAL U \$3.95



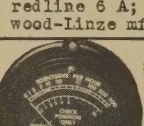
MULTIMETER by  
Modutec, zero  
adjust; scale  
0-100 VDC,  
0-75-150 MADC  
Full scale is  
100 ua; 3x2 1/2,  
fits 2-1/8" dia hole.  
#821155, unused, \$5.95



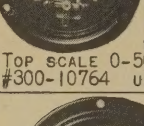
METER ASSORTMENT,  
five U.S. mfg me-  
ters 2 1/2"-3 1/2"-up;  
mixed odd scales, FS-100 ua  
and up-no choice \$10/asst



PRESSURE METER  
0-30-60 in in-  
crements of 10;  
electrical type  
as used in mil-  
vehicles. 2 1/2" dia  
O.D. green rim;  
#6620-514  
-4662, unused, \$5.95 ea



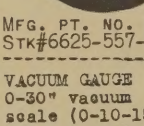
BATTERY CHARGE, FS-10 amps  
redline 6 A; 2 1/2" rd, Ben-  
wood-Linze mfg. Unused, \$4.



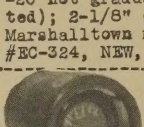
ROENTGENS  
PER HOUR METER  
50 MICROAMPERE  
D.C FULL SCALE  
3 1/2" RUGGEDIZED  
REMOVEABLE  
PLASTIC LENSE,  
BLACK FACE.  
TOP SCALE 0-500, LOWER 0-10  
#300-10764 UNUSED \$3.95



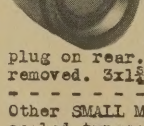
BALLANTINE  
V.T.V.M.  
METER  
ONLY  
AC VOLTS  
1-10  
DECIBELS  
0-20  
WESTON 643  
4 1/2" or EQ.



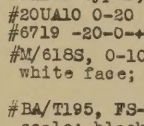
MFG. PT. NO. 205007 NEW  
STK#6625-557-0899 \$8.95



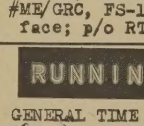
VACUUM GAUGE  
0-30" vacuum  
scale (0-10-15  
-20 not gradu-  
ated); 2-1/8" dia  
Marshalltown mfg  
#EC-324, NEW, \$4.50



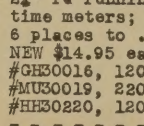
ME-68/PRC-14  
0-200 UA meter  
consists of  
1 1/2" dia meter  
in rubberized  
housing w/U-77  
plug on rear. Meter easily  
removed. 3 1/2" dia; NEW \$5.



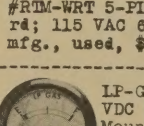
Other SMALL METERS, 1 1/2" sq  
sealed types; used, \$6 ea:  
#20U10 0-20 se FS-200 ua  
#6719 -20-0+20 se FS-1 ma  
#M/618S, 0-10 scale FS=2 MA  
white face; used.



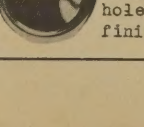
#BA/T195, FS-25 ma, 0-500  
scale; black face, used.  
#ME/GRG, FS-1 ma black  
face; p/o RT66-7-8, used.



RUNNING TIME  
GENERAL TIME  
2 1/2" rd running  
time meters;  
6 places to .1  
NEW \$14.95 each:  
#GH30016, 120 VAC 60 Hz  
#MU30019, 220 VAC 50 Hz  
#HH30020, 120 VAC 50 Hz



#RIM-WRT 5-PLACE METER, 3 1/2"  
rd; 115 VAC 60 Hz. Various  
mfg., used, \$9.95



LP-GAS METER, 0-1  
VDC full scale.  
Mounts in 2" dia.  
hole. Chrome  
finish #48560-2,  
\$1.50 ea.

STORE HOURS  
9 A.M. to 5:30 P.M.  
MONDAY THRU FRIDAY  
9 A.M. TO 1 P.M. SATURDAY

## TERMS

PRICES NET, F.O.B. LIMA, OHIO  
SEND MONEY ORDER, CER-  
TIFIED CHECK, VISA, or  
MASTERCARD with PURCHASE  
ORDER for IMMEDIATE SER-  
VICE.

We reserve the right to hold an  
order accompanied by personal  
or company check until after  
check clears the banks.

MINIMUM ORDER \$5.00  
PLUS SHIPPING CHARGES

Include sufficient money for  
shipping charges. (UNUSED  
PAYMENTS RETURNED AT  
ONCE.) Otherwise we will send  
shipping charges collect.

C.O.D. ORDERS, SEND 50% of  
PURCHASE with ORDER. CASH  
BALANCE will be COLLECTED  
UPON DELIVERY.

When writing for information  
PLEASE state what specific  
information you desire.

## DESCRIPTIONS

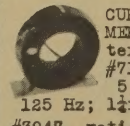
ALL MATERIAL OFFERED IN  
THIS CATALOG IS IN "USED-  
COMPLETE" CONDITION, UN-  
LESS QUALIFIED AND/OR  
NOTED AS "RECONDITIONED,"  
"UNUSED," or "NEW."  
MERCHANDISE IS NOT OPER-  
ATIONALLY CHECKED UNLESS  
SPECIFIED AS "CHECKED."  
EQUIPMENT DESCRIBED AS  
"REPAIRABLE"--MEANING "A-  
BLE TO BE REPAIRED"--IS  
ELECTRO-MECHANICALLY COM-  
PLETE, BUT REQUIRES SOME  
TROUBLESHOOTING BY THE  
CUSTOMER.

## AC VOLTMETERS

0-2 VAC 2 1/2" dia; Simpson  
Model 125, used, \$4.95  
0-8 VAC, 3 1/2" rd; various  
manufacturers, used \$6.95  
0-10 VAC 2 1/2" rd. \$4.95  
3 1/2" rd or sq \$5.95 var.mfg.  
0-30 VAC 400 Hz 3 1/2" rd;  
Weston 476, unused, \$5.95  
30-150 VAC 60 Hz, various  
mfg: 2 1/2" rd., used, \$6.95  
0-300 VAC, 2 1/2" rd, used \$6.  
0-100 VAC, 3 1/2" rd., Hickok  
Model 47M, used, \$5.95  
0-15 VAC, 3 1/2" rd., various  
mfg., used, \$5.95  
0-150 VAC, 1 1/2" sq clear  
plastic; Pace mfg. NEW \$7.

## AC AMMETERS

0-250 MA AC expanded scale  
3 1/2" rd Weston 476. Used \$9  
0-125 ACA FS=5 A for 400  
Hz; 3 1/2" rd. Hickok \$9.95



CURRENT TRANSFORM-  
ERS for AC amme-  
ters; unused.  
#7150, ratio 260:  
5 A, 40 VA 50-  
125 Hz; 1 1/2x4" dia, \$4.95  
#3947, ratio 200:2.5 A 5VA  
400 Hz; 1 1/2x3 1/2" dia, \$2.95

## D.C. MILLIAMPS. D.C. VOLTMETERS

FS=1 MADC, 0-1.0-50 scale,  
3 1/2" rd clear case; Used \$5.  
0-3 MA-DC, 3 1/2" rd. sealed.  
#4081, unused, \$6.95  
0-15 DC MA, 3 1/2" rd sealed;  
various mfg. Used, \$5.95  
0-100DCMA 100MA. MOVE.  
3 1/2"RD. RUGG. #4265 N \$6.95  
0-150 DCMA SC. USED  
3 1/2" RD. STD. CAY22061 \$5.95  
0-200 DCMA SC. 2 1/2" RD. USED  
#MR25200DCMA \$3.95  
0-200 ma dc, 3 1/2" rd, vari-  
ous mfg. Used, \$5.95  
0-20 MA-DC, 3 1/2" rd. Various  
mfg. Used, \$5.50 Unused \$7.  
0-500 ma dc 3 1/2" sq, bent  
pointer tip; used \$4.95  
0-300 MA DC, 3 1/2" rd, clear  
plastic case. Used \$5.95  
1-0-1 MADC, 2 1/2" rd sealed;  
various mfg., used, \$5.95  
0-50 MADC, 3 1/2" rd., various  
mfg., used, \$6.95  
100-0-100 MA DC, 3 1/2" rd  
Weston 301; Used, \$5.95

0-100 VDC, 3 1/2" rd clear  
plastic case; used, \$5.95  
0-15-600 VDC, 2 1/2" rd black  
face; w/mult. code-Used \$6.  
0-2 VDC 2 1/2" sq, Simpson  
mfg for TMC; used, \$5.95  
0-5 VDC, 3 1/2" rd., various  
mfg., used, \$6.95  
0-80 VDC 3 1/2" rd; various  
mfg., unused, \$6.95  
0-100vdc sc. 2 1/2" RD. RUGGED  
#9545 NEW \$5.95  
0-750 VDC, 3 1/2" sq Simpson;  
used, \$5.95  
0-200 VDC, 3 1/2" rd. sealed;  
various mfg. Used, \$6.95  
0-300 VDC, 2 1/2" round; vari-  
ous mfg. Unused \$5.95  
0-500vdc sc. 3" sq.  
#231-1624 Used \$5.95  
0-1000 VDC, FS=500 ua, 3 1/2"  
sq. Hoyt mfg. #1075 New \$6.  
KILOVOLT DC, FS=1 MA:  
0-3 KVDC, 2 1/2" rd new \$5.95  
0-600-1500 2 1/2" rd used \$6.  
OTHER VALUES IN STOCK, WRITE

## D.C. MICROAMPS.

0-200 UADC, 3 1/2" rd, vari-  
ous mfg; used, \$5.95  
0-200 UADC and -8-0+6 DB,  
2 1/2" rd. sealed, new, \$4.95  
0-500 UADC, 2 1/2" rd sealed;  
various mfg. Used, \$4.95  
0-100 UADC, 2 1/2" rd sealed;  
various mfg. Used, \$4.95  
FS-20 UA DC, 0-2 ma indi-  
cated; 3 1/2" rd, \$6.95  
50 UA MOVEMENT, SCALE -30,  
0, 150, POINTER AT ZERO, SEAL  
ED, 2 1/2 RD USED TRC30150 \$4  
0-5-10-20 Peak Volts, FS-  
500 ua; 2 1/2" rd Weston 1021  
sealed. Used, \$4.50

## R.F. AMMETERS

0-15 RF AMMETER, 3 1/2" rd.;  
various mfg. Used, \$16.95  
ART-13 0-5 ANTENNA CURRENT,  
FS=250 ma; external trans-  
former coil not available;  
2 1/2" rd black face. Used \$5.  
0-10 ANTENNA CURRENT, 2 1/2"  
rd black face w/thermocoup-  
le; p/o BC-442. Used \$9.95  
WATER TEMPERA-  
TURE METER,  
3" dia with  
20-240 F  
expanded  
scale.  
W/6 ft  
copper  
capillary.  
#261-9858, NEW \$14.

FS-50 UA DC, 0-50 ua & 250  
ma scale; 3 1/2" sq. NEW \$7.  
CLEAR PLASTIC  
FS=100 UA METER  
with non-linear  
SWR and 0-20 W  
scales; 2-3/8"  
sq face 1/2" dia  
hole. #SWR-020, NEW \$4.95

## DC AMMETERS

FAN-SHAPED ME-  
TERS, plastic w/  
zero adj. 3" top  
2 1/2" bottom; 3" H.  
Fits 2" dia. hole  
EMI mfg. Unused.  
#EMI-5VDC, 0-5 VDC, \$5.95  
#EMI-25VAC, 0-25-250 VAC  
scale, FS-25 VAC, \$5.95

0-5 AMPS DC  
TRIPLITT 420G  
4 1/2x4 w/zero  
adjust arc  
mtg bezel.  
#KS19563L2,  
Used \$12.95  
WESTON 1941, 0-500 AMPS DC  
FS=50 mv; 4 1/2x4, used, \$12.

JEWELL MODEL  
73T METERS,  
3 1/2x3 for 2 1/2"  
dia hole-NEW  
0-15 VDC \$7.  
0-20 VDC  
scale, FS=50 mv, \$6.95  
0-200 ADC, FS=50 mv, \$7.95  
200 AMP DC SHUNT for 50 mv  
meter movements; 6x1 1/2, 1 lb  
GE#200A-50MV, NEW, \$8.00  
\*\*\*\*\*  
JEWELL 73T 0-200 ADC meter  
w/GE 200 amp shunt, \$15.00

0-15 AMPS DC  
FULL SCALE,  
2-3/8" square;  
2-hole flange  
mount 3-3/16"  
across. Emico  
#D2877, NEW, \$6.95 \$4.95  
WESTERN ELECTRIC 3 1/2" round  
clear plastic case; used:  
0-15 ADC \$12. 0-10 ADC \$12.

DC AMMETERS, FS=50 mv:  
0-30 ADC 2 1/2" rd; NEW \$6.95  
0-200 ADC 2 1/2" rd NEW \$6.95  
0-1500 ADC 3 1/2" rd used \$7.  
BIG LOOK  
0-20 DCA SCALE  
50 mv 3 1/2" N \$8.



## TRANSISTOR AUDIO AMP

TRANSISTOR AUDIO AMPLIFIER w/5-transistors, on-off-volume and tone controls. Inputs for ceramic or crystal phono cartridges. Other possible uses as homebrew receiver, intercoms, child's projects. Use with 8 or 16 ohm 3" or 4" speaker. Req 6-9 V AC or DC; with schematic. 1 1/2x2 1/2x3 1/4. #ER-10-1231 NEW \$2.95; 2/\$5.00-100, 500, 1K LOT QUANTITY PRICES AVAILABLE-

## HARMON-KARDON PCB

HARMON-KARDON AUDIO COMPONENT CIRCUIT BOARDS, all new surplus with schematics:

**STEREO TONE CONTROL BOARD** with ganged treble, bass, volume control balance pots. Tone controls are each 2/dual 50K; volume is 4-gang 100K. Also 3/4PDT push on/push off switches, 6 transistors; -26 VDC req. #HK-0866, \$5.00

**TONE CONTROL-AUDIO EQUALIZER**, five ranges: 60, 320, 1K, 5K, 12K Hz. Requires addition of five 50K ohm slide resistors (not available) and -30 VDC. W/schematic. #HK-1561, \$2.50 ea

**POWER SUPPLY/SPEED CONTROL BOARD** for record player. Consists of speed control circuit for 33/45 RPM player using 29 VDC motor (not included). Has 22 transistors w/usable lead lengths, two opto couplers (4N27). An interesting gadget board w/schematic. #HK-134450, \$2.25

**RECTIFIER-CAPACITOR CIRCUIT BOARD**, has capacitors: 7/47 mf 100 V, 2/47 mf 63 V, 2/500 mf 50 V. 6x3x1 1/2, 1 lb. #HK-26239B, \$1.50

## SPEAKERS

**BOOKSHELF SPEAKER** in walnut-grained vinyl-covered 7x10 1/2x2 1/2 enclosure. Has 4" dia 16 ohm 1 W speaker and 6 foot cord with RCA plug; 2 lbs sh. #ER-WD-SFK NEW \$4.50 ea 2/\$7.

**SPEAKER PAIR in PLASTIC ENCLOSURES**, each 4" dia 16 ohm 1 W speaker in attractive 6 1/2x6 1/2x5 1/2 enclosure with 6' cord and RCA plug. White & black plastic per pic; 4 lbs sh wt. #ER-PL-SFK-PR NEW \$4.95/pair.

**SPEAKER WRAP** for assembling 10x20x4 walnut-grained vinyl-covered enclosure; no grill cloth. 7 lbs sh. #ER-SFK-ENG, 2/\$3.00

**3 X 5 SPEAKER**, 2 watts with 1 1/2" dia magnet. Specify 8 or 16 ohms; 1 lb. \$1.35 \$95/100 \*\*\*\*\*

100 - 500 LOT PRICING available on all above.

## TELE COSTER I

**TELE COSTER I TELEPHONE METER**, cost-effective device for the individual or business who wants to keep "tabs" on the length and costs of long-distance and, perhaps soon, local telephone calls. Initial and secondary rates/period are programmable using the numeric plus 6-function keyboard. LED display shows cost/period plus elapsed time hr-min-sec. Also display flashes 15 sec before rate change and has X60 speed-up time so maximum acceptable charges could be determined before the call. In sturdy, handsome beige plastic case. Requires 115 VAC 60 Hz; 2 lbs. NEW w/info \$10.

## WHAT-CHA-MA-CALL-IT

We were told these were originally used to allow up to four computers to access one peripheral, but we have no further info. Hence, we are selling them for parts which are RS232-type connectors 4 ea DB25S and 1/DB25P, Triad 26.8 VCT 1.7 amp transformer, 4 1/2x5 1/2 heatsink, two circuit cards, 8' 3-cond line cord, and 3x12x10 1/2 enclosure. PC cards have 4/7400, 7401, 3/7404, 5/7420, 7430, 7473, 7476, 7493, 5/7490, 4/7495, 3/74121, 74153, 74156, 74, 64, 2/75189, 555, MC1469R, MC1463R, 2N3055, MJ3101; also selectable crystals 8800/2400 Khz and baud rates 300/110. 12 lbs sh. #340-400, used, \$12.95

## DATA CASSETTE

**DATA CASSETTE RECORDER**, adaptable for use with most microcomputers having RS-232 input. Functions: Eject, Record, Rewind, Ready, Forward, Stop, Read-from-Tape, and Write-on-Tape. Tape speed 1-7/8 ips, 4-track 2-channel. Similar to Monroe Model 392. Requires -12 -3 45 V. Includes 3' cable w/DB-25P plug & book. 8x5x3, 4 lbs sh. #DC-REC, unused, \$29.95

**'O' GAUGE CABLE** 2-CONDUCTOR "O" GAUGE COF-PER CABLE in PVC jacket. Use for making welder cables, jumper cables, or wind generator hook-up. Each cable 2-conductor at length indicated. #8369-25 25' \$25. #8369-50 50' \$42. #8369-100 100' \$69.50 (Weight 1 lb/foot.)

**RIBBON CABLE** for computer wiring or similar jobs; 20-conductor #22 stranded wire with ten color codes.

#RIB-20C:	10'	100'	500'	1000'
Price per foot:	\$.85	\$.60	\$.48	\$.35

## 0.5-32 MHZ RECEIVER

R-392/URR RECEIVER, 0.5 to 32 Mhz AM-CW in 32 one Mhz bands using mechanical digital tuning. Triple conversion on lower 8 bands, double on others. Selective bandwidth 2-4-8 Khz; 100 Khz crystal calibrator points. With 25 tubes of 26A7, 28A6, 28C6, 26D6, 6AJ5, 12AU7. Requires 24-28 VDC 5 amps. Rugged vehicular version of the famous R-390 receiver. 11 1/2x14 1/2x11; 58 lb sh wt. Used-repairable, \$135. Checked, \$200. MANUAL for R-392, partial repro, \$15.00 IS-166 SPEAKER for R-392, used, \$12. w/set. 115 VAC POWER SUPPLY f/R392-no connector \$25.

## 2-12 MHZ USB 100 WATTS

AN/PRC-47 RADIO SET with RT-671 transceiver as the major component covering 2 to 11.999 Mhz USB (voice and CW+800 Hz) in 1 Khz steps. power output 100 watts PEP (H1) or 20 W PEP (Lo). FSK mode possible if used with suitable converter (not available). Collins manufactured set is transistorized except for PL-177WA tube in power amp and tubes 5907, 7761, and 7905. Has 5-place mechanical digital tuning, P-A load and tune controls, and XMT output meter. Designed for field or vehicular use, RT671 operates from either 24 VDC 20 amps or 115 V 400 Hz. 7x12 1/2x13 1/2, 45 lb sh. Used-repairable, \$300. W/H-33 handset, AS-1320 antenna, \$320. MANUAL repro \$17 w/purchase. \*\*\*\*\* PRC-47 ACCESSORY PACK: AS-1321 15' whip antenna, LS-166 speaker, H-233 headset, J-45 key/leg-iron, CX-8396 cable, U-239 adapter, backpack harness & frame, and aluminum transit case; 95 lbs sh. \$55 w/RT-671 purchase.

## URC-68 DISTRESS RADIO

AN/URC-68 DISTRESS TRANSCIVER, handheld unit designed as an emergency radio for aircraft pilots; operates over 38-42 Mhz FM and 230-250 Mhz using 4 preset channels, voice, MCW, and beacon. All have 40.5 Mhz FM and 243 Mhz UHF channels; other three frequencies depend on selected crystals (not available), 50 Khz spacing. Power output 500 MW (FM), 200 MW (UHF); range 19 miles line of site or 3-5 miles over varied terrain. Includes squelch, built-in microphone, speaker, and antenna. Requires 11-16 VDC originally supplied by BA-1112 battery (not available). 6x3 1/2x1 1/2, 3 lbs sh. Used-repairable with receiver and transmitter output, \$79.50 AS-IS, no output but good modules, \$59.50 MANUAL, partial reproduction, \$10.00

## LINEAR AMPLIFIER

AM-6155/GRT-22 LINEAR POWER AMPLIFIER (ITT Model 3212), designed for 50 watt output from 10 W exciter input over 225-400 Mhz. Uses Kima X6512 tetrode in silver-plated cavity housed in removable drawer; 175-turn counter dial for tuning. Cavity has added feature VHF/UHF switch facilitating conversion AM-6155 to 116-150 Mhz VHF range with some circuit changes. Main chassis contains solid-state power supply and buffer amp/multiplier; test meter on panel monitors voltages. Requires 105/120/210/240 VAC 50-400 Hz and +20 V reg 60 ma, +20 V keyed. 7x19x18 1/2, 80 lbs sh in two packages. Schematic packet included. Used-excellent, not tested, \$149.50

## D O L L A R

## D A Z E

PLEASE ORDER BY NUMBER. Unit prices only as indicated. Look for more DOLLAR DAZE throughout this catalog.

\*\*\*\*\*  
40-81 8" x 17" PLEXIGLASS SHEETS, 1/8"th Specify SMOKED, \$1.25

\*\*\*\*\*  
41-81 LOUD BUZZER HORN as used in smoke alarms; 2" dia 1 1/2". 6 VDC \$1.25 ea; 12 VDC \$1.35 ea; 115 VAC \$1.45 ea \*\*\*\*\*

9 RECEIVER-TRANSMITTER CHASSIS, solid-state, broadcast band. \$2.00

LINE CORD, 2-conductor #18 gauge as on appliances; 6 feet long, white. NEW, 3 for \$1.25 43-83

23-77 BRASS COUPLINGS for 3/8" dia. x 3/4" long shafts. 3 for \$1.00

MOBILE RADIO PLATE w/switch light, jack, 6' 10-cond. cable. Plate 3 1/2x3 1/2. \$1.00 25-77

44-83 49 Mhz WALKIE-TALKIE PC BOARD, no speaker or mdc; 9 VDC req. \$1.50 ea, 3 for \$3.

MIXED HARDWARE: screws, nuts, washers removed f/equip. Usable; 3 lbs. \$1.00 30

42-82 RUBBER EQUIPMENT FEET 1-1/8" dia rubber with 1" I 1/2x20 bolt; w/o nut. 8/\$2.00

LEVEL METER, FS-150 UA, 3/8x7/8 face; o/a 1x1 1/2. \$1.00 3/\$2.00 39-78

38-79 SPEAKER, 3" dia. 8, 1 watt. Sanpo SP024, new, \$1.00



## BC & ARC COMMAND SETS

Even though they have been on the surplus market since the end of World War II, the Command Set Receivers and Transmitters are still popular with hams and experimenters. The series consists of either SCR-274N (BC-prefix) or AR/ARC-5 receivers (R-prefix) and transmitters (T-prefix).

As a group, the receivers cover 190 KHz to 9.1 Mhz and the transmitters 2.1 to 9.1 Mhz. Over the years many conversions have been written for the sets. However, the last comprehensive collection of such information, CQ Surplus Conversion Handbook, went out-of-print in 1979.

If you are interested but not familiar with the Command Sets, your best source for info about them may be another ham. Schematics for any of the receivers and transmitters are available from us @ \$1.50 each plus a SASE.

Command receivers are superheterodyne types which may be tuned by the use of a special spin knob or from a remote position with a control box and spline shaft. Each have six tubes: 3/12SK7, 12SR7, 12A6, and 12K6. They are designed to operate from a DM-32, a 24 VDC dynamotor with an output of 250 VDC 60 MA and 24 volts. Shipped less dynamotor. Size: 5x5x11, 15 lbs sh.

WRITE for current availability

Command transmitters with proper use can put out 50 watts CW and 30 watts phone. Modulation is obtained from either of two separate units, BC-456 for single tube modulation or MD-7 for push-pull. The 575-600 VDC 175-200 MA and 24 volt power requirements were originally satisfied by the 24 VDC DM-33 dynamotor which mounted on either modulator. The transmitters use a 1629 "eye" tube for tuning and crystal calibration plus tubes 2/1625 and 1626. Size: 5x7x12, 17 lbs. sh.

BC-456 MODULATOR for use with Command Transmitters; single tube modulation with tubes 1625, 12J5, 0D3. Has provision for mounting DM-33 dynamotor. 7x8x10, 11 lbs. sh. Used \$12.95

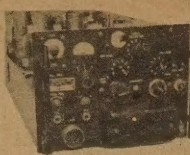
PUSH-ON TUNING KNOB f/Command Receivers, \$3.  
MC-215 SPLINE for remote tuning, 6 ft., \$1.50  
DM-32 DYNAMOTOR, 25 VDC f/receivers, \$4.95  
AC POWER SUPPLY f/Command Receivers; w/speaker, our construction. Kit, \$32. Wired, \$40.  
FT-233/MT-7 single receiver rack, \$3.00  
FT-234/MT-39 single transmitter rack, \$3.25  
FT-227/MT-70 SHOCKMOUNT f/FT-226 rack, \$2.50  
C-48 TUNING CONTROL, panel style for ARC receivers 190-550 KHz; MC-215 required, \$8.  
C-1245 CONTROL, like C-48 but 108-135 Mhz \$9.  
C-37 DUAL CONTROL, 190-550 KHz and 118-148 Mhz dials for R-11/R-19 pair; unused \$8.95  
BC-496 DUAL CONTROL, 3-6 and 6-9 Mhz dials for BC-454/BC-455 pair; unused, \$7.95  
BC-450 TRIPLE CONTROL, 190-550 KHz, 3-6, and 6-9 Mhz dials for BC-453-454-455; unused \$8.

R-19/ARC AIRCRAFT RECEIVER, 118 to 148 Mhz continuously tunable. No dial; designed for remote tuning with spline shaft. IF-15 Mhz. With tubes 9002, 3/9003, 14A7, 2/14F7, 14F7, and 12A6. Uses accessories similar to ARC-5 Series. Requires 250 VDC 60 ma and 24 VDC. 6x5x11 1/2; 13 lbs. sh. Used, \$18.95

R-11A RECEIVER, 190-550 KHz. Similar to R-19 but has 85 KHz IF and tubes 2/14A7, 1437, 14F7, 14F7, and 12A6. Used, \$12.95

R-22 BROADCAST BAND RECEIVER, 550-1500 KHz. Similar to R-11. Used, \$24.95

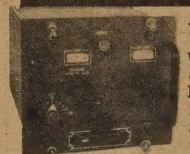
## ARC-39 RECEIVER-XMITTER



RT-427/ARC-39 RECEIVER-TRANSMITTER, REPLACES COMMAND SETS; COVERS 2.0 TO 9.1 Mhz IN TWO BANDS; SIX CRYSTAL-CONTROLLED FREQUENCIES PER BAND. RF OUTPUT: 10 WATTS MIN. INTO 10 OHM LOAD (100 PF). 100% AMPLITUDE MODULATION; AUDIO OUTPUT: 200 MW WITH 1000 UV 30% MODULATED INPUT; 800 MW MAX. BANDWIDTH: 8 KHz @ 6 DB DOWN. METER INDICATES RELATIVE RF OUTPUT TO THE ANTENNA. WITH TUBES 0B2, 2/12A7, 4/5749, 5750, 3/5686, 4/5814, & 3/6159. POWER REQUIRED: 28 VDC 4.4 AMPS WHEN RECEIVING; 8.5 AMPS TRANSMITTING. SIZE: 7x10x2 1/2; SHPG. WT: 42 LBS. PRICE: USED, COMPLETE, \$49.50

MANUAL FOR RT-427/ARC-39, REPRODUCTION, \$10.

## 225-400 MHZ CONVERTER



AM-914/TRC AMPLIFIER-CONVERTER, originally used with military R-417 receivers as plug-in for the 225-400 Mhz range. Continuous tuning of RF and oscillator; 30 Mhz I.F. Unit has conversion possibilities as discussed in R. Grove's article in 10/80 issue of CQ magazine. With tubes 5670 and 4/6J4. 7x6x9 1/2, 17 lbs sh. Used, \$34.95

AM-1179/GRC, 50 to 100 Mhz, \$39.50  
AM-913/GRC, 100 to 225 Mhz, \$39.95  
AM-1177/GRC, 400 to 600 Mhz, \$44.50  
AM-3203A/GRC, 1.35 to 1.875 Ghz, \$49.50



AM-915/GRC AMPLIFIER-MULTIPLIER, used in T-302 transmitter for 225-400 Mhz FM range. 120 watts output from two 4X150's. 12x6x14, 45 lbs. Used \$55.

AM-1180/GRC, 50-100 Mhz, one 4X150A, \$49.50  
AM-1178/GRC, 400-600 Mhz; has one 4X150A and one 4X150G as power amp tubes; used, \$75.00

CV-1275/ARN (ARC B-18) DATA CONVERTER, solid-state unit processes VOR or localizer navigation signals; 28 VDC, 6x2x6. Used, \$30.

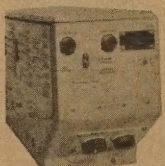
## SCR-522 RECEIVER-TRANSMITTER

AM CRYSTAL CONTROL, 30 WATT, 4 CHANNEL ON ANY FREQ. IN THE 100-156 MC RANGE. TUBES TRANS. 2/832, 6SS7, 3/12A6, 6G6 REC. 1/9002, 9003, 12C6, 12H6, 3/12SG7, 12A6 & 2/12A7. UNITS CAN BE REMOVED FROM CABINET CASE SEPARATELY. REQUIRES POWER SUPPLY. SIZE: 16x12x10 1/2; WT: 50 LBS. RE-COND \$34.95  
CONNECTOR PLUGS, \$1.50 EA. OTHER ITEMS AVAILAB.



R-77/ARC-3 VHF RECEIVER A.M. 100-156 MC, CRYSTAL CONTROL ON 8 PRE-SET CHAN. WITH TUBES 6/6AK5, 3/12SG7, 2/12SN7, 1 EA. 9001, 9002, 12A6, 12H6, 12SL7 & 12SH7. VOLTAGE REQ. 24 VDC & 210 VDC @ 210 MA.

Size: 11x7x15; WT: 21 LBS. USED \$24.50  
R-5009/ARC-502 SIMILAR TO ARC-3 EXCEPT MADE FOR CANADA. (WE WILL SHIP WHAT IS AVAILABLE)



T-23/ARC-5 TRANSMITTER, companion to the R-28, has 10 watt output, though can be modified for higher rating. Uses two 832 and two 1625 tubes. Audio power for modulating originally supplied by MD-7 modulator

Frequency channel selection made by separate C-30 control unit. Requires 24 VDC for relays and selector; 600 VDC 175 MA for HV. Size: 15x8x5 1/2; 18 lbs. sh. Gov't. reconditioned \$25.

## ANTENNA RELAY

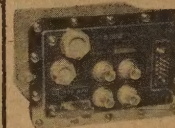
ANTENNA RELAY UNIT for Command Sets; switches antenna from transmitter to receiver. With 2 1/2"rd 0-10 antenna current meter and 5KV 50 pf vacuum capacitor. 4x3x5, 6 lbs sh. Unused.  
#RE-2/ARC, black finish, \$14.95  
#BC-442A, aluminum, \$15.95



R-101/ARN-6 RADIO COMPASS RECEIVER, 100-1750 KC IN FOUR BANDS. WITH TUBES 6/12SK7, 4/12SK7, 2/26A7, 2/2050, 1/12SY7 & 1/12SX7. POWER REQUIRED 24-28 VDC. SIZE: 11x7x1 1/2; 40 LBS Used, \$45.00

Gov't reconditioned \$65.

AS-313/ARN-6 LOOP ANTENNA USED \$15.00  
ID-91/ARN-6 INDICATOR 3" NEW \$12.95  
PD-5/ARA-19 TUNING DRIVE USED 9.95  
AM-203B/ARA-19 AMPLIFIER NEW 8.95  
C-149/ARN-6 CONTROL PANEL, USED, \$9.95  
MC-124 FLEX. TUNING SHAFT 20 IN. USED 1.50  
MC-203 "T" ADAPTER USED 1.50  
MC-136 RIGHT ANGLE ADAPTER USED 2.00



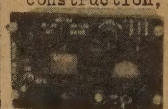
CU-308B/U ANTENNA COUPLER; USES CATHODE FOLLOWER TO COUPLE SINGLE ANTENNA WITH THREE RECEIVERS IN THE 2 TO 24 Mhz RANGE. INCLUDES THREE 24 VDC 500 OHM SPST RELAYS, 4/5906 TUBES, AND FOUR BNC CHASSIS CONNECTORS. POWER REQUIRED: 24 VDC 180 MA. 5x5x3 1/2; WT: 4 LBS. UNUSED, \$9.95

AT-382 LOOP ANTENNA for receivers in the 190-1500 KHz range such R-23/ARC-5, R-11, and R-836/ARN-59. 9" dia loop is turned manually by use of MC-215 spline and spin knob. Has BNC connection for RF. 14x9x4, 10 lbs sh wt. AT-382/L-10, Used, \$10.95



R-836/ARN-59 DIRECTION FINDER RECEIVER, same as Aircraft Radio Corp R-30A DF receiver used in light aircraft. Covers 190-1750 KHz in bands 190-400, 400-840, and 840-1750 KHz; replaces

AT/ARN-6 radio compass system. Can be tuned using push-on knob or remotely using C-2275 control box and MC-215 spline listed separately below, IF 142.5 KHz; tubes 2/5718, 5696, 5/5899, 3/5902, 2/6021, 6112. Requires 24 VDC 1 amp, 110 VDC 90 ma, 125 VDC 20 ma; also 13 V 100 Hz for loop selects if used for DF. Voltages originally supplied by DY-107 dynamotor (not available). 4x4x10 1/2, 9 lbs sh. Used, \$24.95  
OPERATOR'S MANUAL, \$3. SCHEMATIC, \$2 w/set.  
MC-215 SPLINE, 6', \$1.50; Spin Knob, \$2.00  
ID-637/ARN 3" dia COMPASS INDICATOR, \$8 w/set  
AC POWER SUPPLY w/speaker for R-836, our construction; 14 lbs sh wt, \$45.00



C-2275/ARN-59 CONTROL BOX for tuning R-836 in three bands; also Tune-to-Max meter, volume control, BFO, and Loop switches. Requires 28 VDC; 3 1/2 x 5 1/2 x 2 1/2, 2 lbs. Used \$12.

## R-1250 VHF RECEIVER

R-1250/GR VHF RECEIVER, transistorized single channel

crystal-controlled in the 118 to 148 Mhz AM range. Two stages RF and mixer shielded; 17 Mhz crystal IF filter. Uses CR-98-style crystal (not included). Controls for on-off/automatic gain, RF gain, squelch, 600 ohm phone jack. Requires 115/230 VAC 50-60 Hz; Wilcox mfg. 1 1/2 x 19 x 8, 12 lbs sh. Unused with manual, \$65.



## PRT-4 XMITTER

AN/PRT-4 MINIATURE TRANSMITTER, designed to operate on two pre-set channels between 47 and 57 Mhz. Output 450 mw (Ch 1), 50-250 mw (Ch 2); also 150 Hz tone. Has built-in speaker and clips onto belt or pocket. Requires 12 VDC originally supplied by BA-399 battery (not available). Units sold "as-is" less antenna crystals, battery box. 2x4x2 1/2, 2 lbs. \$16.95



## PAGING HORN

OUTDOOR PAGING HORN with seal-  
ed voice coil and 5" dia alum-  
inum horn. Rated 15 watts 8  
ohms. Includes mounting bracket.  
et. O/a 4 1/2" deep, 4 lbs sh.  
#BZL-0518, NEW, \$9.95

## EMERGENCY FLASHER

EMERGENCY LIGHT-FLASHER-  
CHARGER, plugs into car  
lighter with 14 feet of  
cable and provides bright  
clear flasher for emer-  
gencies or continuous  
lighting for repairs, map  
reading, etc. Also has  
provision for trickle  
charging battery from another vehicle using  
an additional 5 ft cable connected to its  
lighter circuit. Has meter which indicates  
approximate charge time required. 6x4x3,  
4 lbs sh. #EMERG-LFC, w/cables, NEW, \$5.00  
LIGHTER CABLE, 14' as above, \$2.50; 30' \$1.

## SWR INDICATOR CIRCUIT

STANDING-WAVE RATIO  
INDICATOR  
CIRCUIT, assemble  
a SWR meter using this  
1 1/2" square 0-10 scale  
(FS=2 MA) meter with  
filters and rectifiers and a modified Scher-  
ring bridge. One pair of bridge arms is re-  
sistive, the other capacitive. In theory the  
bridge circuit is balanced when the antenna  
is tuned to 52 ohms resistive resulting in a  
zero reading on the meter. 30-239 connector.  
Bridge: 2x2x1; 2 lbs. #M701/CU-991, \$8.95

PHASE AND LOAD DISCRIMINATOR,  
could be useful in tuning an  
antennas system, if used in  
circuit with a sensitive zero-  
center microammeter. Phasing  
and loading discriminator pro-  
duces DC voltages proportion-  
al to the reactance of a sys-  
tem. Phasing output shows the type of react-  
ance (capacitive or inductive) and the load-  
ing's indicates the amplitude of impedance  
referenced to 52 ohms resistive. In both  
cases zero DC output is ideal (may not be ob-  
tained in practical circuit). A third output  
is proportional to relative antenna current.  
2x3x3; 2 lbs. sh #T201/CU-991 w/diag., \$4.95

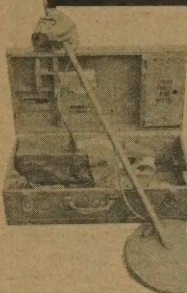
## DAV WALKIE-TALKIE

DAV-2 PORTABLE TRANSCIVER with direc-  
tion-finder circuit; operates on single  
channel between 2.3 and 4.5  
Mhz @ 200 MW. Has controls  
for receive, transmit, and  
sense. Also water-tight O.D.  
plywood case, JK-26 phone  
jack, connection for T-45  
mic, FT-243 crystal (no fre-  
quency choice), book, and  
tubes 3/3S4, 2/1T4, 1R5, and  
1S5. Requires 67.5 VDC 3 ma, 135 VDC 19 ma,  
6 VDC 30 ma, and 1.5 VDC 225 ma. Size: 10 1/2 x  
3 1/2 x 10, 8 lbs sh wt. Used, \$10.95  
\*\*We will try to ship matched frequency pairs  
when two or more DAV's are ordered.\*\*

ACCESSORIES which can be used with DAV-2:  
T-45 LIP MIC or T-30 THROAT MIC, used, \$4.00  
CCL-49559 HEADSET ASSEMBLY consisting of  
cloth helmet with headphones, unused, \$4.95  
H-62 HEADSET, used, \$4.95  
CW-51071 LIP MIC, used w/H-62; unused, \$3.00  
CCL-66081 ANTENNA, seven section 15"-85"  
collapsible-telescoping, \$1.50 w/DAV purch.

MAB PORTABLE TRANSCIVER  
CHASSIS, originally designed  
to operate between 2.3 and  
4.5 Mhz on a single channel;  
200 MW output. In waterproof  
black plastic case; mic and headset cut-off  
and not available. W/tubes 3/3S4, 2/1T4, 1R5  
and 1S5. Requires 67.5 VDC 3 ma, 135 VDC 19  
ma, 1.5 VDC 225 ma, 6 VDC 30 ma. Size: 8 1/2 x  
2 1/2 x 7 1/2; 8 lbs. sh. Used, with book, \$6.95

## WW-II MINE DETECTOR



SCR-625 MINE DETECTOR SET,  
famous World War II unit  
designed to detect anti-  
tank mines buried at depth  
up to 24". Detection indi-  
cated on meter attached to  
handle or audibly by the  
M-356 resonator. Set in-  
cludes C-446 13" dia x 1"  
search coil, BG-1140 con-  
trol, BG-1141 amplifier,  
M-350 handle, M-356 res-  
onator, BG-151 bag,  
CH-156 transit chest,  
and manual. With tubes  
2/1N5 and 1Q6. Requires  
two "D" cell batteries and BA-38 battery (not  
available) which supplied 103 and 67 VDC.  
Units are in good physical condition, but be-  
cause of their age we do not guarantee their  
operation. 49 lbs sh wt. Used. \$79.50 \$59.50

## 2-30 MHZ POWER AMP

POWER AMP/MODULATOR  
DECK from T631/GRC, a  
2-30 Mhz transmitter  
400 watts peak AM at  
100% modulation or 100  
W nominal AM-CW. Uses  
a 4X250 in P-A, two  
4X250's in modula-  
tor; RF input 4 Vrms  
Has 4-position switch  
bands 2-3, 3-6, 6-10, 10-30 Mhz  
and three 0.43-18 uH variable ribbon induc-  
tors all driven by 26 VDC meter. Other com-  
ponents 3-Kinase sockets and chimneys for 4X-  
250's, 12-Centralab 850 4 KV capacitors, and  
blower. Requires 26 VAC, +26 +250 +1100 -105  
VDC. 6x15 1/2 x 13 1/2, 34 lbs. W/schematic, \$149.90

## MIRRORED REFLECTOR

INFRARED NIGHT VISION REFLEC-  
TOR originally used on tanks.  
23"x16" mirrored surface fo-  
cuses light about 12" above  
center. Heat created can  
"smoke" wood on sunny day.  
4 1/2" fall from extreme peri-  
meters to center. Surface may have scratches.  
Nice experimenter's item. 12 lbs, used, \$25.

## SCOPE FOUNDATION

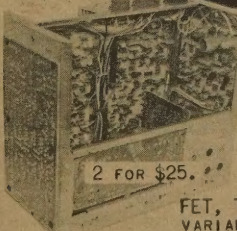
OSCILLOSCOPE FOUNDATION with  
2AFL 2" dia CRT, shield, and  
socket plus four variable  
resistor controls on front  
panel and fixed resistor board  
behind panel. Does not have  
power supply; schematic not  
available. 7 1/2 x 3 1/2 x 8 1/2, 4 lbs sh.  
#10WG/205892, unused, \$19.95

## PHANTOM ANTENNA

GP PHANTOM ANTENNA as used  
with WW-II 350-9050 KHz air-  
craft transmitters to monitor  
RF at remote point. Has 3 1/2" rd  
0-10 RF ammeter, 10 KV 0.0002  
and 0.0003 mf G2 mica blocking  
capacitors, 12-nickel-plated  
terminal posts in 14x12x9 1/2 alumi-  
num case w/hinged top; 22 lbs. Unused \$35 \$28.

## CARTVISION COMPONENTS

### FISH TANK



FISHTANK OF ELECTRONIC  
COMPONENTS, P/O VIDEO  
TAPE SYSTEM. CONSISTS  
OF DEMODULATOR, SERVO-  
AMP, DROPOUT COMPENSA-  
TOR, PER/POST PROCESSOR  
DC POWER SUPPLY (115 V  
60 HZ; OUTPUT -12/-12  
AMP REG, 5 VDC 1 AMP  
UNREG. MANY PARTS, IC's  
FET, TRANSISTORS, TRANSFORMER  
VARIABLE RESISTORS, CAPACITOR  
MORE! SIZE 14x12x6 1/2 WT 15 \$14.95

## DUAL FOOT SWITCH



TWO PEDAL FOOT SWITCH,  
each normally open 115 V  
10 amp contacts. Switches  
are mechanically inter-  
locked so that only one  
can be actuated at a time;  
interlock lever can be  
independent operation of  
switches. Includes 15' 14/3 heavy rubber  
cable. 10x8 1/2 x 2 1/2, 8 lbs. #2PED-FS unused \$9.95

## ENCLOSURES



STEEL CABINET with lift top  
for 7"Hx14"Wx3"D panel. O/a  
8x16 1/2 x 8 1/2, 7 lbs. #SK-CAB7148, used, \$5.95  
PANEL with miscellaneous parts f/above, \$1.50

CY-2126/TRC EQUIPMENT CABINET  
with 115 VAC 60 Hz 5" cooling  
fan mounted on rear; black  
crackle finish. Panel space  
19 1/2"Hx19"Wx1 1/2"D; o/a 21 1/2 x 23 1/2  
x 14 1/2, 30 lbs sh. Unused, \$19.95

CY-1693/TRC CABINET, panel space 14"Hx19"W  
x 1 1/2"D; o/a 16 1/2 x 22 1/2 x 14, 35 lbs. Unused \$18.

PYE/CAB CABINET, 16x19x14 space  
o/a 17 1/2 x 21 x 14 blue, used \$13.

FILE CABINET for items upto 9 1/2"  
wide X 8 1/2"H; o/a depth 24".  
Steel, O.D. green; 14 lbs. \$6.

CS-61831 CASE w/CHASSIS,  
15 1/2"Wx8"Hx23 1/2"D (20"D be-  
hind panel). Some cut-outs  
on front; may be usable for  
antenna tuner or transmatch  
project. Aluminum; 20 lbs. Used \$12.

CS-1060 CASE w/CHASSIS, P/O  
small scope; o/a 8"Wx7 1/2"Hx13"D.  
Front has cut-out for 3"CRT;  
some parts on chassis. Handle  
on top; 10 lbs. Used, \$8.95

## TRANSIT CASES

TS-382 TRANSIT CASE, o/a 15 x  
19x15 1/2; usable space without  
removal of spacers 10x18 1/2 x 12 1/2  
Not hinged; hasp fasteners.  
Aluminum; 35 lbs. Used, \$14.00

CY-1338 TRANSIT CASE, 20 1/2"Wx18 1/2"H  
x 17 1/2"D; aluminum w/side grips and  
hasp fasteners, 40 lbs. \$16.00  
CY-1342 CASE, as above but 21 1/2"W  
x 18 1/2"Hx20 1/2"D; 43 lbs. \$17.50

CS-15X18 CASE, o/a 23 1/2"Wx18 1/2"Hx17 1/2"  
Usable interior 19x15 1/2 x 14 plus  
4"H cover. Aluminum with side handles and  
hasp fasteners. 46 lbs sh, used, \$16.00

CY-56/TX WOOD CHEST, hinged top w/hasp fast-  
eners; 20x13-3/8x12-5/8 with removable inter-  
nal partitions; handle. 18 lbs, used \$12.00

CY693/PDR-27 ALUMINUM CASE,  
four compartments; 3 1/2 x 4, 7 1/2 x 4,  
1 1/2 x 4, and 13x6 1/2; may be re-  
moved for 13x10 1/2 size 9" deep.  
Hasp fasteners; may need re-  
painting. 12 lbs. Used, \$6.00

CY-3157/USM-144 TRANSIT CASE,  
three ply wood and aluminum  
construction w/hasp fasteners;  
19 1/2 x 13 1/2 x 13 1/2, 32 lbs. Used \$12.

CY-1451 SPARE TUBES  
CASE w/hasp fasteners.  
Removable insert has space for  
7- and 9-pin mini tubes and two 4X/4CX power  
amp tubes. 4 1/2 x 10 x 3 1/2, 4 lbs sh. Used, \$3.50  
CY1091/PDR ALUMINUM CASE, compartments 11 1/2  
x 7 1/2 W and 2 1/2 x 7 1/2 H; o/a 14 1/2 x 7 1/2 x 9 1/2 H. Cover  
hinged w/fasteners and top handle. 11 lbs. \$7.

MOTOROLA MOBILE RADIO CASES,  
olive-drab "80-D" style;  
15 1/2 Wx6 Hx17 1/2 D, 34 lbs sh wt.  
W/key; used, \$14. Specify:  
#CS-KT/MRC xmitter case with  
18-pin connector or #CS-REC/MRC case with  
28-pin connector.  
ALUMINUM CHASSIS, used:  
#CH-6B23, 12 1/2 x 9 1/2 x 3, \$2.50  
#CH-6B17, 17x13x4 1/2 lbs \$5.



## U.H.F. RECEIVER



**R-48/TRC-8 RECEIVER**  
F.M. 230 to 250 MC.  
ONE BAND VARIABLE  
TUNING, VOLTAGE RE-  
QUIRED 115/230 60 CYC  
WITH SPEAKER, PHONE  
JACK, SQUELCH CIRCUIT  
2 1/2" METER FOR CIRCUIT  
CHECKING. With tubes 8/6AG7, 1/9002, 1/5U4, 1/6V6, 1/VR-150, 1/6N7, 1/6SN7, 1/6AL7. SIZE: 20x19x16; WT: 75 LBS.  
USED \$45.00

## CV-89 FS CONVERTER

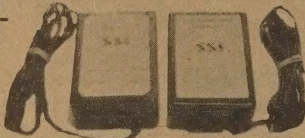


**CV-89/URA-8 FREQUENCY SHIFT CONVERTER**, audio frequency conversion type with 2B1 CRT. Shifts 10-200 Hz @ 1 KHz center frequency; 200-1000 Hz @ 2550 c-f. Maximum keying speed: 60 wpm for single channel. Teletype output 60 ma DC loop @ 70 V. Two AF inputs, one for narrow one for wide shift; each 600 ohms ot, 60 uW to 60 mW input power. Requires 115 VAC 60 Hz. 5 1/2 x 17 x 21, 55 lbs sh wt. Used-reparable, \$85. Flanges for rackmount use, \$5 additional. Manual, partial repro, \$10. Power conn., \$3.

**CV-116/URR FSK CONVERTER** for use with receivers having final IF's from 450 to 510 KHz such as R-220, R-388, R-390A and SP-600. Converts frequency-shift signals into DC pulse that key the energizing circuits of teleprinters; translates at 100 dot Hz/sec. Unit can be used with two receivers. Channel A IF center frequency 50 KHz; channel B, 29.3 KHz. Input FS range 150-1000 Hz, 100 uv minimum; 50 ohm impedance. Separate control unit required between CV-116 and teleprinter to match output-input signals. Requires 115 VAC 60 Hz. 8 1/2 x 17 x 18; 80 lbs sh. Used, repairable, \$100. Manual, partial, \$10.

## REMOTE SIGNALLER

**REMOTE SIGNALLER RECEIVER & TRANSMITTER**, intended use was for the transmitter to be actuated by a telephone bell. The transmitter would then signal the receiver via the power line and activate the receiver's outlet to which a lamp or other appliance could be connected. Maximum outlet load 200 watts. Transmitter has telephone pick-up coil, on-amp, and tone oscillator. Receiver has 567 tone decoder circuit and triac control circuit for the outlet. Each has On-Off switch, 5' cord, and measures 3 1/2 x 1 1/2; 3 lbs sh. Schematic included, may need minor repair. #RMS-R/T, \$8.95



## PRD-1 DIRECTION FINDER

**R-395/PRD-1 RADIO DIRECTION FINDER** 100 KHz to 30 Mhz AM-CW-ICW in seven bands; FM over 12.5-30 Mhz. 34 KHz bandwidth. 100 KHz crystal calibrator for bands 1-2-3 (100-1200 KHz), 1300 KHz bands 4-5 (1.14-5.8 Mhz), and 4000 KHz bands 6-7 (5.5-30 Mhz). Has two tuned RF amplifiers using two 6AK5's. Also 7/1U4, 1R5, 2/1U5, 6C4, 3C4, and 3A5. Designed to be used with diamond shaped AS-536 and AT-301 antenna which mounts on receiver's top. Requires 1.5, 6.3, -6, and 90 VDC. 16 1/2 x 13 1/2; 64 lbs net, 75 lbs sh wt. Used, repairable, \$105.00  
MANUAL, partial repro, \$12. Schematic only \$3  
DY-79/PRD-1 DYNAMOTOR POWER-SUPPLY, fits and plugs into bottom of R-395 and provides all the voltages for the receiver from 24 VDC 7 amp input 10x14x17, 38 lbs sh. Used, \$35  
Power input connector \$3 w/set

## FACSIMILE TRANSCIEVER



**STEWART-WARNER MODEL 180 DATAFAX TRANSCIEVER**, facsimile machine designed to send and receive printed matter and images over telephone lines or private wire. Produces up to six shades of gray. Drum scanner speed: 180 RPM; 6 minute transmission time for 8 1/2 x 11 message. Receives 1500-2500 Hz signal; 2150 Hz required to activate demodulator. Select manual or automatic operation modes. Uses 200' rolls of facsimile paper (not available). Units tested for basic send-receive; some adjustments may be necessary. Schematic & info packet included. Requires 100-127 VAC 60 Hz. 16 1/2 x 21, 70 lbs Used, \$175 \$125.

## WW-II VEHICULAR RADIO

**BC-620 TRANSCIEVER**, part of SCR-509-510 radio set as used in World War II vehicular communications. Receives and transmits over 20-27.9 Mhz FM range on any two of 80 different crystal channels spaced 100 KHz apart. Transmitter output: 1.2 watts. Has tuning meter and tubes 1L6C, 1LH4, 4/1LN5 2/1291, 1294, 4/1299. Uses FT-241 crystal-type (not included) and requires 1.5 VDC 0.7 amp, 90 VDC 45 ma, 7.5 VDC 0.3 A, 150 VDC 45 ma. Size: 12x16 1/2 x 2 1/2; 40 lbs. Used, \$59.50



**CS-79 BATTERY BOX** for manpack use of BC-620 or BC-659; 17 lbs sh. Used, \$6. Unused, \$10.  
**SCR-509/510 MANUAL**, \$7.50  
**SCR-609/610 (BC-659) MANUAL**, \$7.50  
**TS-13 HANDSET**, \$10.00 with purchase of set.

## 4.4 - 5.0 GHZ TRANSCIEVER



**RT-252/TRC-27 MICRO-WAVE TRANSCIEVER**, 4400-5000 Mhz pulse-position modulated, continuously tunable. Converts video channel pulses into RF for transmission and receives RF and converts it back into video pulse. Receiver IF: 60 Mhz; 10 Mhz bandwidth. Noise figure: 13 db. Has AGC and AFC. Transmitter uses video amplification and plate modulation of planar triode type RF oscillator. With tubes 2K22 Klystron, 6280 planar triode, 13/5654, 5670, 5726, 5727, 5814, 2/12AT7, 2/6X4, 6AU6, 3/0A2, 5933, and 3/6AQ5. Power required: 115 VAC 400 Hz. Size: 14 1/2 x 25 1/2 x 11 1/2; 75 lbs. sh. Used, \$150. \$85.00 Schematic, \$5.00

## RT-5010 TRANSCIEVER

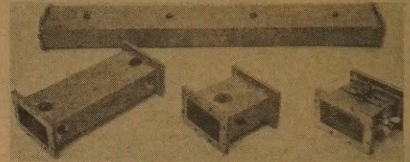


**RT-5010/PRC-510 CANADIAN PORTABLE TRANSCIEVER**, Canadian version of U.S. RT-176A/PRC-10A transceiver. Covers 38-54.9 Mhz FM continuously tunable. Receiver IF 4.3 Mhz; audio output 600 ohms. Transmitter power output 900 MW with normal range of about five miles. Microphone input 150 ohms. Controls for volume, tuning, squelch, pointer adjust, and dial lock. Can be used with either U.S. or Canadian versions of H-33/PT handset. With tubes 9/5678, 1A4, 2/5672, 3/5676, 5A6. Requires 135 VDC, 67 V, and 1.5 VDC. (BA-279 battery see page 18.) Units shipped less 4300 KHz calibrator crystal which is not essential for operation. 9 1/2 x 3 x 10 1/2; 9 lbs; used-not checked, \$20.95

**RT-5009/PRC-509 CANADIAN TRANSCIEVER**, same as RT-510 except 27 to 38.9 Mhz FM; similar to U.S. RT-175A/PRC-9A. Used, \$22.95

**AT-5001/PRC WHIP ANTENNA**, 11"-47"L, \$3.00 ea  
**CY-5007/PRC BATTERY BOX**, 33 w/set purchase.  
**H-33/PT (U.S.) HANDSET**, \$10.00  
**MANUAL for PRC-9A, -10A (U.S.)**, \$7.50

## 3.7-4.17 GHZ WAVEGUIDE



**COPPER WAVEGUIDE**, 2"x1" size for the 3710 to 4170 Mhz range; Western Electric manufacture, removed from telephone installations. Filters are tuned to preset frequency; adjusting screws can be reset to desired frequency. No further information available.

#1301-Series FILTER with four adjusting screws; 18 1/2" length, \$24.95  
#1303-Series FILTER, two top and two side adjust screws; 6-11/32"L, \$17.95  
#1300-Series FILTER, one top and one side adjust screw; 3-5/32"L, \$12.95  
#400-Series TUNER, two 1/4" dia adjust screws; 2 1/2" long, \$14.95  
#ED51566-30 TUNER/TRANSDUCER, two 1/4" dia adjust screws, one 3/8" dia screw port; 2-7/8" long, \$16.95  
#J368330K1 XMTX AMPL, dual section 2-5/32" and 1 1/2" variable internal port; o/a 4 1/2"L, \$19.95  
#ED63919-31 AMPLIFIER with 416B tube with 3/8" dia screw port adjacent to tube grid cap; assembly silver-plated brass. o/a 5 1/2 x 3 1/2 x 1-3/8, 4 lbs sh. \$27.95  
Mating 6-prong connector, \$2.00

## COLLINS RECEIVERS

**R-389/URR VLF RECEIVER**, Collins mfg, covers 15-1500 KHz AM-CW-MCW in two ranges, 7 bands. 455 KHz IF; selectivity 100 Hz-8 KHz in five steps. 4-place mechanical digital tuning and autotune; 39 tubes. Sold "less line and Carrier Level meters". 115/230 VAC 50-60 Hz; 10 1/2 x 19 x 17 1/2; 90 lbs. Used-reparable, \$250.00



**R-388/51J3 COLLINS RECEIVER**, 0.5-30.5 Mhz AM-CW in 30 bands, one Mhz/band. Wide 6" linear scale; 500 KHz IF. 5-step crystal selectivity 0.2-6 KHz; 100 KHz calibration points. Requires 115/230 VAC 50-60 Hz; 10 1/2 x 19 x 13, 55 lbs sh. Used-reparable \$265. Checked \$330.00

## CANADIAN TRANSCIEVERS

**CRT-1/CPRC-26 CANADIAN PORTABLE TRANSCIEVER**, six channel unit for use in the 47 to 55.4 FM Mhz range. Receiver consists of RF amp, xtal oscillator, mixer, 4/IF amps, limiter, discriminator, and audio amp. Transmitter has master oscillator, modulator, power amp w/3B4. Uses tubes 2/3B4, 5/1A4, 5672, and 3/5678 all of which are in sealed plug-in modules except the 3B4's. Modules are repairable Receiver sensitivity about 2 uv, deviation 15 KHz. Transmitter output 300 MW. Receiver requires 1.5 V 550 ma 45 V 12 ma, 90 V 30 ma; transmitter 1.5 V 850 ma, 45 V 8 ma, and 90 V 30 ma. (Battery not available.) With battery box but less crystals. o/a 3 1/2 x 10 1/2, 5 lbs sh. Used, \$12.95



Accessories for CPCR-26: SCHEMATIC, \$1.50  
**AT-5001/PRC ANTENNA**, collapsible with flex base; 11"L folded, 47" extended. \$3.00 ea.  
**CP-1/PRC COUNTERPOISE**, rubber insulated 4 ft long wire w/split pin plug; use as counterpoise and/or trailing wire antenna. 2/\$1.50  
**CAN-H33/PT HANDSET**, like U.S. H-33/PT but with Canadian plug; \$8.95 with set purchase.  
**H-5002/PRC HEADSET**, one 300 ohm element, \$4.  
**MODULE SPARES**, unused; specify RF OSCILLATOR, IF AMP, MODULATOR, AF AMP --\$1.50 ea, 10/\$10



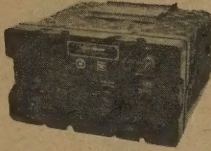
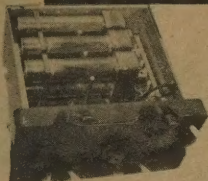
## BC-683 FM RECEIVER

BC-683 FM RECEIVER, designed for 27 to 38.9 Mhz using ten push-button preset channels, or continuously tunable. Has built-in speaker; requires 220 VDC 80 ma, 12/24 VDC. Part of SCR-608-628 radio set. 11x6x12 $\frac{1}{2}$ ; 40 lbs sh. Used, less dynamotor, \$54.95



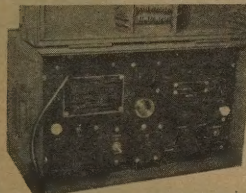
BC-603 RECEIVER, same as BC-683 except 20 to 27.9 Mhz; p/o SCR-508-528 set, WRITE  
BC-604 TRANSMITTER, companion to BC-603; 70 lbs sh. Unused, less dynamotor, \$25.00  
DM-35 12 VDC dynamotor for BC-604-684, WRITE  
MANUAL for SCR-508-528, original, \$7.50

## BANDPASS FILTER



F-237/GRC BANDPASS FILTER, designed to operate from 54 to 70.9 Mhz using dial tuning. Bandwidth: 250 KHz @ 3 db points or 4.5 Mhz @ 40 db points. 50 ohm output and input impedance. Unit consists of a 3-gang variable capacitor coupled to 3 sets of three sealed cavities. Type C connections. F-237 has conversion possibilities for 6- and 8-meter amateur applications. An article about these by W. Tucker, W4FXE, appeared in 12/80 issue of *Ham Radio*. 5x11x11, 17 lbs. \$19.95

## CODE PRACTICE SET

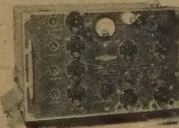


AN/GSC-1 CODE PRACTICE SET designed for student practice of Morse code, accommodating up to 10 keys. Hand keying produces either an audio tone with adjustable volume and pitch or a blinker flash. Has effective range of

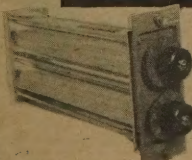
40 ft. if background noise is less than 60 db. Can be operated from 6, 12, 24, or 115 VDC or 115/230 VAC. With built-in speaker, blinker, volume and pitch controls and tubes 6X5 and 2/6AK6. Keys not included. 13x18x11; 58 lbs sh. Used, \$14.95;

## BENDIX TRANSMITTER

BENDIX TA-12B TRANSMITTER, 40 WATTS OUTPUT CW, MCW, AND PHONE FROM 300 TO 600 KHZ AND 3000 TO 7000 KHZ. EACH OF THE FOUR CHANNELS HAS ITS OWN OSCILLATOR, OSC. TUNING, AND LOADING. 0-5 RF AMMETER MONITORS ANTENNA CURRENT. WITH TUBES 4/12SK7 AND 3/807. ORIGINALLY USED WITH MP-288 24 VDC 15 AMP DYNAMOTOR-MODULATOR (NOT AVAILABLE). POWER REQUIRED: 24 VDC 3 AMPS, 260 AND 400 VDC EXTERNALLY MODULATED. SIZE: 10x15x11; WT: 40 LBS. USED, \$39.50



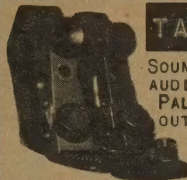
## BANDPASS CAVITIES



FULL-LENGTH TWIN-CAVITY BANDPASS FILTERS, 9-1/8" length; gold-plated. Similar to filters described in W4FXE's article in 2/80 *Ham Radio Magazine*. 8 lbs sh wt. \$22.00 each

F-192/U (100-121 Mhz)  
F-239/U (58.5-67 Mhz)  
F-242/U (84-92.5 Mhz)  
F-241 (76-84 Mhz) F-243/U (92.5-100 Mhz)  
SHORT-LENGTH twin-cavities, \$17.50 each.  
F-195/U (163-184 Mhz) F-201/U (284-314 Mhz)  
F-196/U (184-205 " ) F-202/U (314-344 " )  
F-199/U (224-254 " ) F-203/U (344-374 " )  
F-200/U (254-284 " ) F-204/U (374-404 " )

## TA-1/PT TELEPHONE



SOUNDPOWERED TELEPHONE SET WITH AUDIBLE AND VISUAL CALL SYSTEM. PALM OPERATED GENERATOR PUTS OUT APPROX. 100 V. THAT SOUNDS BUZZER IN OTHER PHONE AND ACTUATES VISUAL INDICATOR. COILED CORD WITH PUSH TYPE BINDING POSTS FOR INTERCONNECTING WIRES TO BE FASTENED TO. COMES WITH FIBER CARRING CASE. SIZE: 8x3x3 $\frac{1}{2}$ ; WT: ACT 2LB USED \$25.00 EACH

## OSCILLATOR



TRANSISTORIZED CRYSTAL OSCILLATOR AND BUFFER, 56 to 99 Mhz with 75 C temperature controlled oven. Requires 5th overtone HC-6 (20 pf) x-tal (not incld). Has external oscillator input and tuning meter and oven output. Requires 12-18 VDC reg. for osc., 22-39 VDC 1 amp for heater. W/BNC and two submini 27 (UG-1465) connectors, power input DEC 9P connector, and schematic. 6x2x3 $\frac{1}{2}$ , #OSC9828, \$8.

## LS-184 SPEAKER

LS-184/AIC-10 LOUDSPEAKER with AM-492 amplifier. 5" blast-proof speaker is rated 5 watts; 5.5 V input for 1 W output 300-6000 Hz. Input impedance approx 900 ohms. Amplifier uses four 5178 tubes parallel push-pull. Transformer coupled input and output. Requires 27 VDC 150 ma and 170 VAC 30 ma. DPDT switch requires wiring. 7x8 $\frac{1}{2}$  x4-1/8, 5 lbs sh. Used, w/schematic, \$22.95

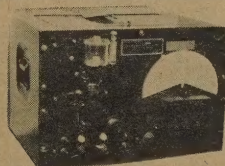
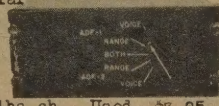


## FL-3 AUDIO FILTER



1020 HZ AUDIO FILTERS, can be used to reduce interference in CW and audio signals for receivers. Each filter provides a sharp null at approx 1020 Hz in voice mode while frequencies near 1020 Hz are passed in "range mode. Response can be broadened by placing a variable resistor from input to output. Terminal strip connections. 3-1/8x3x1 $\frac{1}{2}$ , 3 lbs sh. Used, \$4.95

F-90 AUDIO FILTER, similar to FL-30 except has sharper filter action. Designed for aircraft panel mount; has one 28 V panel light and schematic. 5x2x3 $\frac{1}{2}$ , 3 lbs sh. Used, \$3.95  
MATING CONNECTOR for F-90, \$2.50



RD-60/U CODE RECORDER OF RADIO TELEGRAPH CODE SIGNALS. USES 3/8" WIDE, 800 FOOT ROLLS OF PAPER TAPE. RECORDS CODE SPEEDS UP TO 1000 WORDS PER MINUTE WITH A RECORDING TIME OF 26 MINUTES (LOW) OR 13 MINUTES (HIGH). INPUT SIGNAL FREQ. 500 TO 5000 HZ. INPUT IMPEDANCE 500 AND 5000 OHMS. OUTPUT IMPED. 6 OHMS.

WITH 9 TUBES. POWER REQ. 115 V. 60 HZ. SIZE 19x16x12 $\frac{1}{2}$ ; WT: 150 LBS.

Used-repairable with cabinet, \$24.95; BOOK \$5. Gov't reconditioned with cabinet, \$32.95  
PAPER TAPE for RD-60, \$1.00 ea; 20 rolls, \$10

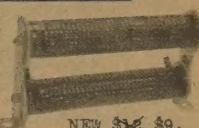
## HEAVY DUTY TRIPOD

MT-3806/PFS TRIPOD, aluminum unit originally used to support field radar but would probably make a sturdy base for a large format camera or other item with some modification. Each 1 $\frac{1}{2}$ " dia x 24" leg holds 1" dia x 22" telescoping section w/ 4" dia cleated foot. Legs can be rotated 180 so equipment can be mounted upside down. 48" max height; no center column. Includes removable 9x6x4 canvas pouch. 8 lbs sh; unused, \$32.95



## 8 OHM 400 WATTS

POWER LOAD RESISTOR PAIR, each 8 ohms 400 watts 8 $\frac{1}{2}$ " lg x 1 $\frac{1}{2}$ " dia; usable for audio when non-inductive loads are not required. Includes mounting bracket; 3 lbs. #RES-8-400FR, NEW \$26 \$9.



DALE 8 OHM 100 W 5% RESISTOR, 8x1 $\frac{1}{2}$ , \$2.00 ea  
2 OHM 200 WATT SLIDER ADJUST, 10x1 $\frac{1}{2}$ , \$1.95

## LANGUAGE LAB RECORDER



LANGUAGE LAB TAPE RECORDER, solid-state design; made by General Electronics Lab. Has three heads: one playback only master head on one track and the other two, playback and record, on a second student track. Uses standard 1" audio tape on upto 7" reels at speeds 3 $\frac{1}{2}$  and 7 $\frac{1}{2}$  ips. In practice, one can monitor the master "in-

structor's" track while recording responses on the student track. The student track can be played back simultaneously or separately from the master track depending upon control selection. The master track, which plays in one direction only, can be recorded upon or erased by switching plug-in wires from the student track heads. Besides its original usage, the recorder could be useful for code practice of for sound-on-sound sound audio experimentation. Audio response approx. 300-8000 Hz. Controls for student and master volume, playback-practice select, pause, and the other standard recording functions. Also three motors for very rapid fast forward/rewind, audio level meter, footage counter, 4" built-in speaker, and four plug-in circuit cards for audio, master audio, student audio, and bias oscillator. Uses common 2N2836 and 2N3702 transistors. Tape and reels not included; microphone and schematic not available. Requires 115 VAC 60 Hz. 18x16x8 $\frac{1}{2}$ , 36 lbs sh. Schematic included. Used, repairable, \$19.95; Checked, \$45.00

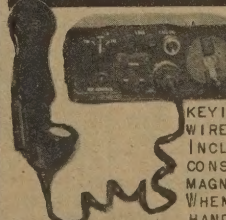
## TELEPHONE TEST SET



I-142/PTM-6 TELEPHONE TEST SET, measures characteristics of telephone and related equipment including these operations: 1. Sound source for mics and receivers; 2. Efficiency test for mics and receivers; 3. Capacitor test for

leakage resistance; 4. Generator test; 5. Ringer test; 6. Insulation test; 7. Dial test indicating percent of pulse period; 8. Continuity test; 9. Instrument tests such as 600 ohm circuit for sound-powered equipment; 24 V. DC-AC res. circuit for common battery phones; impedance matching circuits for carbon and magnetic mics and receivers. Meter has scales -10 to +6 DB and 0-100 VDC. Requires external batteries for 3, 12, 24, and 135 VDC. Batteries not available. 19x12 x9, 46 lbs sh. I-142, used, \$59.50  
TS-903/PTM-6A, more recent; 65 lbs., \$65.00

## FIELD PHONE-CONTROL SET



C-2172/GRC-14 FIELD REMOTE CONTROL SET; DESIGNED FOR USE WITH AN/GRC-14 RADIO GROUP IN AM, PHONE, AND CW

KEYING OPERATIONS OVER A TWO-WIRE 600 OHM TELEPHONE LINE. INCLUDES 20 HZ RINGER SYSTEM CONSISTING OF A HAND-CRANK MAGNETO GENERATOR AND BELL. WHEN USED WITH A H-33/PT HANDSET, THE CONTROL UNIT IS FUNCTIONALLY A FIELD TELEPHONE. TERMINALS PROVIDED FOR PHONES, MIC, AND KEY. SWITCHES FOR SERVICE (CW, AM, AND TEL); FSK CONTROL; AND SIGNAL (BELL OR CALL LIGHT). SOLD WITH H-33/PT HANDSET. POWER REQUIRED: TWO "D" CELL AND ONE 45 VDC BATTERY (NOT AVAILABLE). SIZE: 3x9-3/8x7-1/8; SHPG. WT: 13 LBS. PRICE: UNUSED, WITH USED H-33/PT, \$24.95



# Headsets Telephone Equipment Microphones Handsets



HS-23 HEADSET, 2K ohm using R-14 elements and unused grey plastic headband; 4 1/2" cord w/plug. Less cushions, \$9.25  
 HS-23 w/HB-7 brown headband (not U.S. mfg), 18" cord and PL-354 plug, WRITE

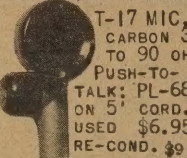
4" CHAMOIS CUSHIONS for use with HS-23 or HS-33, #M301, new \$2.25 RUBBER CUSHIONS #MC-162 2 1/2" \$1.00 MX-41 2 1/2" \$1.25 HB-7 HEADBANDS: Grey \$3.25; Br \$3

CX-1334 CABLE, adapts H-113 or CW49505 to GRC-equip (JK-26 jack and U77 plug, \$4.



#ZA/CAN3538 dynamic headphones, 125 ohm imped;

MOVING COIL-TYPE, QUALITY REPRODUCTION. ADJUSTABLE CANVAS STRAP FITS ON TOP THE HEAD; STEEL-BAND BEHIND. WITH CHAMOIS CUSHIONS, "Y" CORD, AND PHONE PLUG. UNUSED, \$5.95



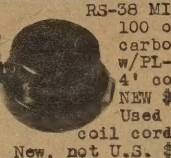
HS-230 HEADSET w/250 ohm elements as used in HS-30; soft 3 1/2" velour cushions, leather headband, & 18" cord w/PL-54 plug. Unused, \$9.95

## SOUND-POWERED INTRUSION MICROPHONE

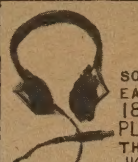
225 ohms with 6" stake for pushing into ground for artillery use. T-56 USI element 1614-11 unused \$3.75

Western Electric Sound-Powered 1024 ohms D-173016 trans. D-173012 receiver new \$3.00 ea.

Carbon Elements F-1 Mic. \$1.50 Lip Mics: M-51 M-6 M419 etc. \$1.50 Telephone elements: U-1 or T-1, \$2.00



RS-38 MIC, 100 ohm carbon; w/PL-68 4" cord NEW \$6. Used w/coil cord \$7



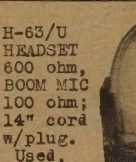
H-113/U HEADSET 600 OHM SOFT PLASTIC EAR CUSHIONS 18" CORD W/PL-54 PLUG THAT FITS JK-26 JACK (SEE CD-307 USED, \$9.95 ELEMENTS, phone or mic, \$2 ea.

EXTENSION CORD ELSEWHERE ON THIS PAGE WT: 3LBS. USED-EX \$5.95

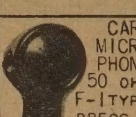
CW49505 HEADSET like H-113 except black and has provision for snap-on CW-51071 lip mic listed below. Used-excellent \$4.95  
 CW-51071 LIP MICROPHONE 100 OHMS IMPEDANCE W/2 SNAPS FOR FASTENING TO H-62 HEADSET, 14" CORD W/PL-291 PLUG INTO EXTENSION CORD CD-318 LISTED ON THIS PAGE OR CW-49561 EXTENSION CORD LISTED BELOW USED \$1.00

JK-38 PHONE JACK FOR INLINE USE, TAKES TWO PL-55 PHONE PLUGS \$1

PUSH BUTTON SWITCHES FOR HANDSETS THAT USE BUTTERFLY TYPES. DIRECT REPLACEMENT. #5930-327-7308 \$1.25



H-63/U HEADSET 600 ohm, BOOM MIC 100 ohm; 14" cord w/plug. Used, \$9.95 ELEMENTS, phone or mic, \$2 ea.



CARBON MICROPHONES 50 OHM F-I TYPE PRESS TO TALK No. C-3 (LEFT) 4" CORD PL-55 PLUG UNUSED \$4.95 M-2/10A/1422 (RIGHT) 4 1/2" FT. CORD PL-68 \$3.95 CO-78 HEADSET "Y" CORD 7" LG. RUBBER COVER NO PLUGS, TERM. \$1.50

AN/GSA-6 CHEST GROUP for use with H-63 headset. Includes SA-142 switch and CX-1077 cord w/U-77 plug. Used, \$8.00

SWITCHBOARD CORD 4 1/2" w/PL-47 #BD-96 \$1.50



HS-30 HEADSET 250 OHM IMPEDANCE hearing aid type light weight headband 7 1/2" cord w/spade lugs 6 1/2 oz. adjustable headband, 54" cord rubber cushions & phone plug. ELI-#978 new \$3.95

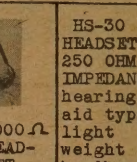


H-33/PT HEADSET PHONE 300 OHM, MIC 40 OHM W/CORD UG-77 PLUG & PUSH TO TALK SWITCH. USED, \$10.

HS-16 HEADSET OR EQUIVALENT (SIMILAR TO PIC.) 2000 OHMS WITH 6" "Y" CORD & METAL TIPS. Unused \$4.95

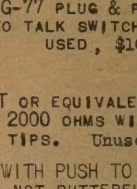
TS-9 HANDSET WITH PUSH TO TALK SWITCH (NOT BUTTERFLY) WITH 3 COND. CORD 4" AND TERMINAL LUGS. NEW COND. \$4.95

TS-13 HANDSET, push-to-talk and cord w/PL-68 & PL-55; p/o BC-659. \$12.



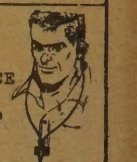
HS-33 600 ohm HEADSET w/ANHB-1 elements, grey HB-7 headband, 4 1/2" cord and PL-354 plug. Used, \$15.00

HS-33 w/brown (not U.S.) HB-7, 18" cord & plug. WRITE M301 CHAM CUSHION \$2.25

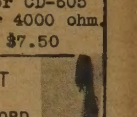


H-81/H-144 OPERATOR STYLE HEAD & MIC SET, rubber-cover elements; receive 300 ohms, mic 40 ohms. On 4 foot cord with UG-77 plug as used with GRC-equipment. Used \$14.

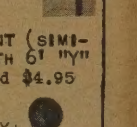
J-38 KEY, like J-37 except w/shorting bar; 4 1/2 x 3 base. Used \$10



JEN-20 HANDSET w/AMPLIFIED receiver for the hearing impaired; Black, white, or beige. NEW \$15.



H-60 HANDSET f/TA-43-312 phones. used \$10



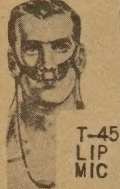
H-189 HANDSET f/PRC-25, VRC-12 Used \$12.

M-80 MICROPHONE with U-229 plug. used \$10

M-29 MICROPHONE with U-77 plug. used \$5

CHAMOIS HEADSET CUSHIONS 4" DIA. \$2.25 PR

METAL HANDSET HOLDER 7/8" older style handsets. Used \$3.



T-45 LIP MIC

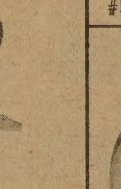


BRASS KEY WITH 2 BEARINGS; ADJUST. CONTACTS, COVER, CORD, AND PLUG. #R11950, \$4.75

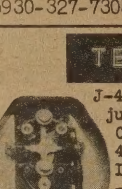
M-86/U MAGNETIC MICROPHONE: 50 OHM IMPED. PUSH SW. LEVEL CONTROL 7" CORD. UNUSED \$14.95



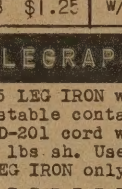
T-30 THROAT MIC



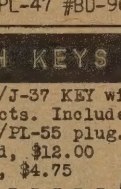
T-30 MICROPHONE CARBON TYPE, 75 OHM 500B BELOW 1 MILLIVOLT, FLAT RESPONSE WITH PL-291 2 CONT MALE PLUG, 11" CORD PRICE: Used, \$4.00



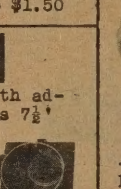
J-45 LEG IRON w/J-37 KEY with adjustable contacts. Includes 7 1/2" CD-201 cord w/PL-55 plug. 4 lbs sh. Used, \$12.00



LEG IRON only, \$4.75



CANADIAN #48 KEY (left), ball-style button; toggle switch for Send-4 lbs sh. #CAN-48, unused, \$8.50



Receive. 5 1/2 x 2 1/2 base, canvas leg straps, and 5" cord with PL-68 plug. 4 lbs sh. #CAN-48, unused, \$8.50

## TELEGRAPH KEYS

J-45 LEG IRON w/J-37 KEY with adjustable contacts. Includes 7 1/2" CD-201 cord w/PL-55 plug. 4 lbs sh. Used, \$12.00

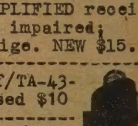
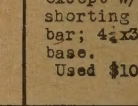
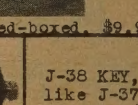
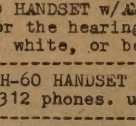
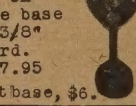
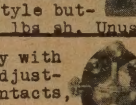
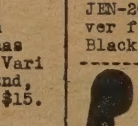
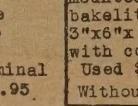
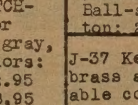
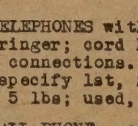
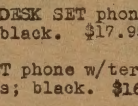
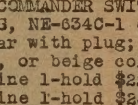
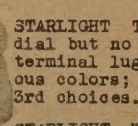
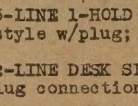
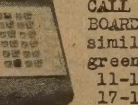
LEG IRON only, \$4.75

CANADIAN #48 KEY (left), ball-style button; toggle switch for Send-4 lbs sh. #CAN-48, unused, \$8.50

Receive. 5 1/2 x 2 1/2 base, canvas leg straps, and 5" cord with PL-68 plug. 4 lbs sh. #CAN-48, unused, \$8.50

## STANDARD TELEPHONE EQUIP.

All of our standard telephone equipment is sold as "used-complete" only unless otherwise noted. Some adjustments may be required so that the equipment conforms to your local telephone company's system.



TP-6 TELEPHONE 1940's-50's style phone with metal base, plastic handset, rotary dial, & ringer; 8 lbs. Used, \$15.

CALL COMMANDER SWITCHBOARD, NE-634C-1 or similar with plug; gray, green, or beige colors: 11-line l-hold \$22.95 17-line l-hold \$28.95

5-LINE 1-HOLD DESK SET phone style w/plug; black. \$17.95

2-LINE DESK SET phone w/terminal lug connections; black. \$16.95

STARLIGHT TELEPHONES with dial but no ringer; cord has terminal lug connections. Various colors; specify lat, 2nd, 3rd choices. 5 lbs; used, \$15.

STARLIGHT WALL PHONE, as above but for wall mount. Used, \$16.00

WALL TELEPHONES with dial and ringer; cord has terminal lug connections. Styles and manufacturers vary; no color choice. Used \$17.

AUTOMATIC ELECTRIC TONE KEY PAD with brushed aluminum cover; use for tone control, signaling, etc. Each key produces two tone output; characters 0 thru 9, \*, #. Requires 9-15 VDC. 4-3/8 sq x 2 1/2 x 2 lbs. With hook-up info. #AE-WA-1127, NEW, \$9.95

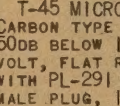
DOUBLE PLUG D178542 for headset; similar to type 289 and 298. Unused \$2.50

BLACK STANDARD TELEPHONE HANDSET & CORD, old style, Used \$5. Newer-style used \$3.00

HB-1 HEAD-BAND \$1.50

for 1-3/4" elements

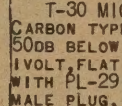
HB-1/2000 ohm elements & Y cord 6' used used \$4



T-45 MICROPHONE CARBON TYPE 1000HM 500B BELOW 1 MILLIVOLT, FLAT RESPONSE WITH PL-291 2 CONT MALE PLUG, 11" CORD Used, \$4.00



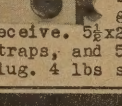
CD-307 CORD EXTENSION FOR CORDS WITH PL-54 PLUG AS USED ON HEADSETS, 65" LG WITH JK-26 JACK & PL-55 PLUG. Used, \$2.00



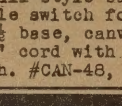
CD-604 CORD WITH IMPEDANCE MATCHING TRANSFORMER 500OHM TO 4000, USED WITH HS-30 HEADSET, 6" CORD & PL-54 PLUG. Unused \$1. Used 60¢



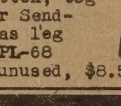
CD-605 CORD SAME AS CD-604 ONLY 30" LG. WITH PL-55 PLG Used, \$2.00



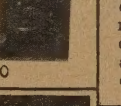
PL-55 PHONE PLUG 30" CORD \$1.00



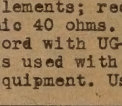
JK-34 PHONE JACK TO FIT PL-55 PLUG Used, 3 for \$1.



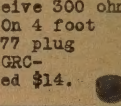
COILED CORD SET



COILED CORD SETS



Three conductor, 24" to 72" 75¢ 12" to 36" 50¢



3-cond. in colors 18"-36"; green, red, lt. blue 50¢ Grey or pink, 3/4" \$1



MC-385 HIGH to LOW ADAPTER IMPEDANCE FOR HEADSET 4000-6000HM Unused, \$1.50



**GENERAL TIMERS**  
 TM-506 to right, 0-14 second indicator 110 volt 60 Hz. motor repeat cycle used \$5.50  
 TM-229 same as above, no face plate, knob or dial. For 10 seconds oper. max. U \$4.

**INDUSTRIAL TIMERS, 115 VAC**  
 15 amp contacts; Unused:  
 EAGLE SIGNAL #175-0-100-13 15 sec delay, 0-100% dial set; 3 1/2 x 3 1/2 x 5. \$19.95 \$15.  
 CRAMER 412E, 3 1/2" dia x 5 1/2", 30 min \$12. 60 min \$12.50

**HONEYWELL HUMIDIFIER CONTROL** as used on home humidifiers. Plastic element tape senses 10%-70% humidity and closes normally open 120 VAC contacts depending on setting of variable control. Shaft 1 1/2 dia; o/a 1 x 1 1/2 x 4 1/2. #H46B1150 NEW \$1.95

**MN-40 INDICATOR**  
 0-360 DEGREE SCALE SIMILAR TO ABOVE EXCEPT THAT IT IS OPERATED MECHANICALLY BY USE OF A SPLICED FLEXIBLE SHAFT OR SPIN KNOB OR BOTH.  
 MN-40 INDICATOR 5" \$4.50  
 MC-124 SHAFT 20" \$1.50  
 MC-137 SPIN KNOB \$1.00

**ID-718/ARN DUAL AZIMUTH RADIO COMPASS INDICATOR, 3"** dia 360 degree scale in 2 deg increments.  
 Has two selsyns 26 V 400 Hz or 12 V 60 Hz; usable in 9/79 QST antenna position project. 6 1/2"D. Unused \$18.

## TIMER BONANZA

**CARTRI-VISION TIMER CONTROL, 115 VAC** 60 Hz motor w/SPDT contacts; upto 8 hr delay. Also 18 V 200 ma transformer, 12 VDC SPDT relay, SPDT & 4PDT center-off slide switches, transistors, rectifiers. \$1.35

**STOVE TIMER CLOCK MECHANISM** w/start-stop control dials. Grey face 5x4; style may vary. 115 VAC 60 Hz w/switch rated 250 VAC 30 amps. Knobs not original, but usable. 2 lbs; #QL55760, \$3.50

**CANVAS BAGS, STRAPS AND COVERS,** MAY BE USED OR UNUSED. ALL ARE CLEAN WITHOUT TEARS. SHOULDER STRAPS ARE ADJUSTABLE AND MADE OF COTTON WEBBING.

**CW-TRB ROLL BAG** for tools, etc.; folds to 17" x 8 1/2" w. Used, \$5.00

**CW-189 BAG w/ strap; 10"Hx 9 1/2"Wx8"D.** Minor tears, \$5.

**BG-1942 BAG, AS ABOVE WITH STRAP CLOSE COVER AND 8"Hx 8"Wx2 1/2"D.** \$2.50

**BG-56 ROLL BAG** for MS-49 thru -54 mast sections; no tears. Used, \$6.50

**MAST BASE COVERS, unused:**  
 BG-108, for MP-48, \$3.00  
 BG-67, for MP-37-57, \$2.75

**ST-19 CARRYING STRAP, 65" LG. X 2"W; w/2" SWIVEL-EYE SNAP HOOK AND TONGUELESS-BAR BUCKLE** NEAR ONE END TO ADJUST LENGTH. \$3.00

**ST-42 CARRYING STRAP, AS ABOVE, NO SWIVEL, \$2.50**

**ST-54 CARRYING HARNESS AS USED WITH BC-1000 TRANSCIEVER; 38 1/2" EXTENDED LENGTH, 14" WIDTH. ADJUSTABLE STRAPS AND SNAP HOOK, \$3.**

**ST-120 HARNESS FOR PRC-8-9 -10 RADIO SETS. SIMILAR TO ABOVE, SAME USE, \$5.00**

**CW-216 CARRYING BAG F/PRC ANTENNA AND H-33 HANDSET; COMPARTMENTS FOR EACH. O/A 19" LONG WITH TOP 5" WIDE TAPERING TO 3" WIDE AT BOTTOM, 3 1/2" DEEP. W/SNAP COVERS AND HANGER FOR AMMO BELT, \$6.00**

**CW-206 ROLL BAG FOR MS-116 SERIES MAST SECTIONS. COMPARTMENTS FOR GRC-SERIES SET ACCESSORIES. SNAP AND WEB STRAP CLOSURE. O/A 40" LONG, 3"Hx5"D. Unused \$8.**

**TIME-O-MATIC SIGN CONTROL, 115 VAC** 60 Hz. THREE CONTACTS RATED 15 AMP EACH. TWO ALTERNATELY MAKE AND BREAK ONCE PER SECOND FOR 15 SEC; OTHER BREAKS FOR 20 SEC. AT THE SAME TIME. THEN ALL THREE MAKE AND THE CYCLE REPEATS. SIZE: 3x5x6; SHPG. WT: 5 LBS. #53 K-155, \$4.95

**KEY SELECTOR** CONSISTS OF MANUAL CLOCK MECHANISM FOR SENDING 17 IMPULSES, CAN BE SET TO CALL ANYONE AT 78 STATIONS, SPST LEVER SWITCH 2x2x4 1/2. 4C5100.60A \$1.50

**SYNCHRON CLOCK MECHANISM, No. 610** 110 V. 60 CYCLE 3 WATT 1 RPM #EC-129RB, WITH GEAR ASSY. NO RESET OR COVER. 2x2x2 1/2. 4oz. \$1.35

**SYNCHRONOUS MOTOR, 26 volt** 60 cycle, 60 rpm, shaft 1 x 1/16, motor 1 1/2 x 2 1/2 #1147 \$2

**MOTOR DRIVEN RELAY SPST** norm. open 115 V. 60 Hz. 10 amps. cont. motor 115V 60 Hz. non. sync. 3.8 W. 4 1/5 rpm. Cams can be set to set to make cont 30 to 60 seconds. Also has provision to bring out a shaft. size 2 1/2 x 4 x 2, 1 lb. #N17R-68292 unused \$6.00

**CRAMER TIMER SWITCH ASSY.** MODEL TC-60SEC, 230 v 60 CYC. SWITCH 5 AMP. CONT. 3.8 W. 4/5 RPM MOTOR. \$1.95

**THERMAL SWITCH** opens 30 sec. after cooling. Operate 130 vac. 2m ohm res. 1 1/2 x 1 1/2, 20" leads. M-4199 \$1.50

**AUDIO OSCILLATOR ASSEMBLY,** originally in circuit with 2 6BJ7 tubes to produce 425 to 2295 Hz output in 12-steps of 170 Hz. Has 24/12 pf trimmers and 21 temperature compensating capacitors and resistors. Use as basis for homebrew oscillator. 5 1/2 x 5 1/2 x 4 1/2, 5 lbs. #OSC-DIV3499, \$6.95

**A3-207/CRT-3 ASSY** w/300' #16 strand braided cadmium alloy copper wire on RL-48 reel and crank; mounted to aluminum door w/adjustable brake and snap swivel. Part of CRT-3 xmmitter antenna which attached to kite or balloon. 2x4 1/2 dia, 3 lbs. No door-diameter reels, 6.95 Wire only, \$4.95

**RECORDING TAPE**  
 MAGNETIC TAPE FOR MOST AUDIO RECORDERS, 10 1/2" REEL; 1/2" WIDTH APPROX. 3600 FT LEADING MANUFACTURERS. WT; 2 LB AST3045 \$1.50 4 FOR \$5

**OVERHEAD LIGHT FIXTURE** for RV Van or trailer. Automotive double contact lamp socket for 6-12-24 VDC 25W max lamp; also 5 1/2 x 2 1/2 diffuser lens. Outer 8 1/2 x 5; fits in 7x3 1/2 x 3 1/2. 4 lbs. #174-OL NEW \$4.

**HEATING ELEMENTS**  
 ROUND HEATING ELEMENT, 6" OUTER DIA., 3 1/2" INNER DIA. 1/2" THICK. 118 VAC 500 WATT. NUT TERMINALS. #HSW-6, \$3.  
 BRYANT STRIP HEATING ELEMENT, 120 VAC 150 watts; 1 1/2"W x 8"L including mounting flanges. 2 lbs sh. #6115-931-7883, NEW, \$2.95  
 LOOP COIL TYPE, 9" LONG; 115 VAC 30 W. #83975, \$2.00  
 DOUBLE "U" LOOP COIL, 3" HIGH. 115 VAC 1000 WATT. CHROMALOX #2111-2, \$2.50

**LONG DURATION TIMER WITH 115V RESET RELAY.** 115V 60 HZ 1/16 RPH MOTOR. CAM ACTUATES SPDT MICRO SWITCH. 3 1/2 x 2 1/2 U. UNUSED \$2.95

**ILLUMINATED CLOCK MECHANISM** AS USED ON CLOCK RADIOS. CLEAR PLASTIC FRONT TO TRANSMIT LIGHT, NO HANDS. HAS 60 MIN TIMER ALSO HAS ON-OFF-AUTO ALARM 2" SQ FACE. 115V 60 HZ. SH WT 2 LB. UNUSED \$1.50

**GEARS**  
 GEAR BOX w/two pr beveled 45 gears and 20 other gears 1/2" to 1 1/2" dia on bronze bearings 4x7x4 1/2, 5 lbs #TUN/ARC45 \$5

**AIRCRAFT COCKPIT EXTENSION LAMP**  
 #B-7; uses standard 2-contact auto bulb W/5 1/2" spring retractable cord, dimmer, and ON-OFF sw. Plastic; 2 lbs \$5.95

**TIMER SPRING WOUND TYPE** closed when unit is wound, opens at the end of time. 30 minute 115 volt 20 amp. Lux#2500 \$3.95 60 minute 120/240 vac 15 amp. Rhodes 65b \$4.50

## PARTS GALORE

**TELEMASTER PROGRAM SELECTOR** part of an obsolete pay TV system which featured pre-recorded tape program review, coin deposit register mechanism, and audio amplifier-power supply with 4" speaker. Generates 8 Mhz signal to trigger mechanism and 35 Mhz video output. Tape magazine has recording head and plays 66" or 1" tape in continuous loop. Mechanism has 5 RPM Cramer 115 VAC motor plus other motor, gears, etc.

**Power supply output 150 VDC** 100 ma and 6.3 V 3 amps. Tube line-up 3/6U8, 6BE6, 6BA8, and 12BH7. Cabinet 15x7x7, 21 lbs sh. Our bargain price is worth the tape magazine, coin mechanism, power supply, or tubes alone. NEW, \$6.95

## SWIVEL CASTERS

**SWIVEL PLATE CASTERS, 3 1/2" dia X 7/8" wide wheel** with 3 1/2 x 2 1/2 swivel mounting plate; from computer equipment. 2 lbs. #SW-CAST, \$2.50 ea; 4/\$8.00

**STUD MOUNT CASTER, similar to above but has 2" long X 1" dia threaded stud instead of mounting plate.** #STM-CAST, \$1.75 ea; 4/\$5.

**ID-68/APA-44 AIR SPEED INDICATOR;** CONTAINS A KOLLSMAN TRUE AIR SPEED METER AND A INDICATING WITH A RANGE OF 84 TO 434 KNOTS. HAS OSTER MOTOR AV-240, RELAY, 1/6AK5 TUBE, COMPENSATING DEVICE PLUS MANY OTHER COMPONENTS. 15x7 1/2 x 5; 20 LBS. USED \$15.

**RHODES 60 SEC TIMER, times from 2 to 60 seconds; bell signals time elapsed.** 3" dia plastic case; 1 lb sh. #56414, NEW, \$2.50 each.

**ROLLER INDUCTOR** 1.3 uHy, 5 1/2 turn #12 wire forms 1 1/2" L X 2" dia coil; 3/8x1 1/2" dia shaft. Ceramic form and end plates. O/a 5x3x4 1/2, 3 lbs sh. #939-15-SM, used \$5.95

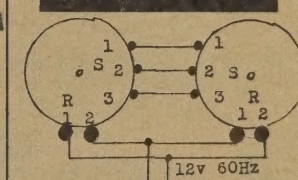
**MC-507 SELSYN-INDICATOR, transmitter unit** usable in wind direction and beam locator systems. Has 3" dia 0-360° scale 5° steps; 12-24 VAC 60 Hz req. 2 lbs. \$8.95 2/\$15.

**I-91(\*) RADIO COMPASS INDICATOR** 3" 360 deg. as. used w/ARN-6 sys. 3 1/2" x 3". (can be used with wind direction system.) used \$9.95 NEW \$14.95

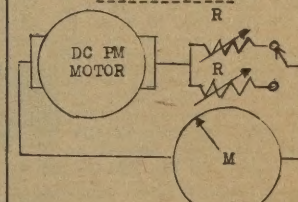
**3" DIA 0-360 INDICATORS, usable for QST antenna position project.** I-81, 5 marks, used \$8.95 ID-637/ARN, 2 marks and VAR knob, unused, \$10.95

**I-101 CROSSPOINT INDICATOR, 3" dia f/glidepath** Good movements/ broken glass \$3.

## WIND SPEED



**WIND DIRECTION INDICATOR** using Oster 4123-10 selsyn listed on page 17. Design your own wind vane and indicator so that you can monitor wind direction from inside your house. Oster #4123-10 selsyn, \$4.



**WIND SPEED INDICATOR** using a 24 VDC FM motor as a generator, a 1 milliammeter and a resistor range scaler so that wind speed can be monitored indoors. We will supply the FM motor and a 3 1/2" rd 0-1.0-50 scale (FS-1 ma) meter; you design the rest. #WS-MOTOR & METER, \$7.95

**AY-1 AUTOSYN MOTOR AS USED IN I-81, I-82 ETC. DIRECT REPLACEMENT.** \$5.95

**I-81 & I-82 ARMATURES ONLY** #3H2716/A1, UNUSED, \$3.95 I-82 GLASS ONLY, \$2.00



## SMALL INVERTER SUPPLY



TRANSISTOR INVERTER POWER SUPPLY, input 24 VDC 500 ma; output 110 VDC 60 ma. Can be used to supply B+ for low power tube type receivers. Transformer has 286 VCT 70 ma secondary. Other uses possible with modification. Reduced output at lower input voltages. Schematic included. #522-1091-004, used-checked, \$9.95; used-defective \$4.95. DA-158 PLUG to fit above inverter, \$1.50 ea.

## 45 KW GENERATOR CONTROL

GENERATOR CONTROL PANEL, United Electric #2K3890 for 45 KW 208-416 VAC 50-60 Hz installation; 3 1/2" rd meters for 0-450 VAC, 0 to 125% full load, 0-60 KW, & 48-62 Hz (reed-type); also voltage, frequency, and governor adjust, AM-VM selector, On-Off Parallel Operation, AC Overvoltage Reset, and Field Flash Voltage button. 22 1/2 x 18 1/2 x 6 1/2, 56 lbs sh. Unused, \$125.00



NORTH ELECTRIC MODULAR POWER SUPPLIES, stable solid-state units removed from equipment. All 115 VAC 60 Hz input; outputs -5% @ 40 centigrade. Appearance varies from picture; 20 lbs sh wt approx.

#N14003KA	3.7 VDC 14 amps	\$21.00
N14005A	5.0 VDC 13 amps	37.50
N64005A	5.0 VDC 28 amps	55.00
N11006A	6.0 VDC 3.5 amps	15.00

FMC PKC-C-56 36 VDC 2.5 amps 22.00

19"W RACKMOUNT MODULAR SUPPLIES, reparable:

#N17005A	5.0 VDC 49 amps	\$60.00
LMF-A-3	5.0 VDC 31.5 amps	45.00
N17006A	6.0 VDC 47 amps	60.00

DEC H721 RACKMOUNT SUPPLY, +5% adjust output +10.5 V 3 amp, -15.5 V 5 A, and -5 V w/5 A current limit (fused 25 A); fan cooled. \$35

SPERRY 4113281 RACKMOUNT SUPPLY, 120/240 VAC input; outputs +6 V 5 amps, -12 V 2.5 A, and +48 V 5.5 amps. \$50.00



LAMBDA SWITCHING POWER SUPPLIES, all outputs +5% adjust; ratings @ 40 C. Not suitable where RF noise is a consideration. Unused or little used.

#	Output	Reg	Size	Wt	PRICE
LUS-8-24	24 V 700 ma	4%	3 1/2 x 1 1/2 x 4	2	\$10.95
LUS-11-15	15 V 7 amp	4%	3 1/2 x 3 x 8 1/2	4	\$19.95
LY3-K-28	28 V 5 amp	1%	2 1/2 x 5 x 7	6	\$26.95
LGS-EES-OVR	5 V 120 A		4 1/2 x 6 1/2 x 17	25	\$115.
LGS-EEL5-OVR	15 V 47 A		4 1/2 x 6 1/2 x 17	25	\$115.

PHILBRICK -300/+300 VDC POWER SUPPLIES, 0.001% designed regulation; not metered, rackmount. #R-300, 300 ma; 42 lbs sh wt. Used, \$37.50. #R-600, 600 ma; 55 lbs sh wt. Used, \$50.00



TRANSFORMER & DIODE ASSEMBLY with Signal 24-4 transformer which has two 12 V 4 amp secondaries. Also two 200 V 40 A diodes, two 300 V 25 A SCR's, and a P&B 120 V 50-60 Hz DPDT relay w/10 A contacts. W/schematic. 10 1/2 x 3 1/2 x 4 1/2, 8 lbs. #ASI-M912VPS, \$12.95

## HI-CURRENT BRIDGES

#A9013AX4 1-0 DUAL PARALLEL BRIDGE ASSEMBLY, has eight diodes each 100 V, 83.7 amps or 220 A if air-cooled, 4500 A surge 1 Hz. 7 1/2 x 18 1/2 x 9, 26 lbs sh. \$39.50 \$30.  
#A9013CSLED1 3-0 FULLWAVE CENTER TAP BRIDGE with 6-300V 83.7 amp diodes; 7 1/2 x 18 1/2, 21 lbs sh wt. Used, \$32.50 \$32.  
#5961-860-1165 (Collins) #548-1278-00) THREE PHASE FULL WAVE BRIDGE, bridge rating 95 VDC max 290 amps max using six diodes. 6 1/2 x 12 1/2 x 8, 22 lbs sh. New \$40.



PF-68 VIBRATOR POWER SUPPLY, provides 100 to 110 VAC 60 Hz 15 or 50 watt output from 6 VDC 6/13 amps (15W/50W) or 12 VDC 3/6.5 amps (15W/50W). With 66" battery cable. 9 1/2 x 11 1/2 x 6 1/2, 34 lbs. Checked, \$22.95

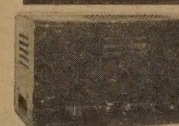
MRC-66 DC to DC SUPPLY has two separate DC to DC transistor inverters operated by 24 VDC input: Output "R" -70 V bias, +100 VDC 20 ma, and +200 100 ma. Output "T" +200 VDC 150 ma 70 VDC (isolated +, -) 75 ma, and 6 VAC 5 amps. Inverters in separate boxes which can be removed and used independently. Also has 24 VDC control relays, Reg-0hm regulator for 6 VAC, looking cabinet with cover & key, plug, and schematic. 9 1/2 x 8 x 16, 21 lbs. \$22.00



24 VDC 5.4 AMP POWER SUPPLY, input 105-125 VAC 50-60 Hz. 10 x 5 x 5; 17 lbs sh. Used. #OM24N5.4-1, \$39.50 \$32.

COLLINS 516F-2 POWER SUPPLY for KVM xmitter; sold less cabinet and tubes. 28 lb Used-reparable \$75. W/cabinet, \$100.00

## 12/24 VDC 22/11 A



GFP-2 POWER SUPPLY, output 12 VDC 22 amps or 24 VDC 11 amps. With mains and load control and output mode indicator lights. Input: 90-130 VAC 60 Hz. Size: 11 x 18 1/2 x 10 1/2, 90 lb sh wt. Used, \$35.00 Now \$45.00

## DYNAMOTORS

TYPE	USED	RENEW	TYPE	USED	RENEW
DM-25	2.95	4.95	D-401		6.95
DM-28	6.95		D-402		6.95
DM-32	2.95	4.95	D-401 (SPEC)		8.95
DM-32	WRITE		DY-9		9.95
DM-33			DY-10		12.95
DM-34	WRITE		DY-17	no base	\$15.
DM-35	WRITE		DY-21		8.95
DM-36	2.95	6.95	DY-22		9.95
DM-37	WRITE				
DM-40	WRITE		DA-6A		8.95
DM-41	WRITE		DA-IF	11.00	
DM-42		15.00	DA-14		8.95
DM-43					
DM-53	4.95		BD-77		19.95
DM-53	5.95	(12V)	BD-83		8.95
DM-64	7.95				

ADVISE US OF YOUR REQUIREMENTS OR WRITE FOR SPECS. PE-86 5.95 PE-98 8.95 (COMP) PE-98 4.95 (DYN) PE-94 9.95

CARTER MA-2503; INPUT 6 VDC 6.3 A. OUTPUT 250 VDC 30 MA. SIZE 3 1/2 x 5 x 3; WT. 6 LBS. USED \$4.95

41S14 F/COLLINS 618; INPUT 27.5VDC 22 AMPS. OUTPUT 650 VDC 550 MA. & 250 VDC @ 150 MA. SIZE 9x14 N \$15

ELECTROSTATICS MODEL 50 SUPPLY, 18-22 VDC 2 amp output from 103-127 VAC in; 6 1/2 x 5 x 4, \$20.00



TRANSISTOR-REGULATED SUPPLIES 115 VAC in: #CD12N.85, 12 VDC 850 ma; on 4 1/2" x 5" circuit board, \$6.

THUNDER SUPPLY, 3.7 VDC 750 ma output; info for 3-10 V 500 ma modification. 3 1/2 x 5 x 3, 4 lbs. \$6.

## INVERTERS



EICOR INVERTER X3516-1 INPUT: 27.5 VDC 165 AMPS. OUTPUT: 115 VOLT 400 CYCLE 2500 V.A 1 PHASE SIZE: 16x11 1/2 x 8; WT: 75 LBS. EXCELLENT COND. \$49.50

## PU-7 INVERTER

INPUT: 28 VDC 160 AMPS. OUTPUT: 115 VAC 400 CYCLE 21.6 AMP. 1 PHASE SIZE 19 1/2 x 8 x 10 1/2; 100 LBS. PRICE: UNUSED \$49.50

## 5AS13NJ3 INVERTER

INPUT: 26 VDC 100 AMPS. OUTPUT: 115 VAC 400 CYCLE 1500 VA 1 PHASE SIZE: 14x9 1/2 x 6; WT: 50 LBS. PRICE: UNUSED \$45.00

## MG-149H INVERTER

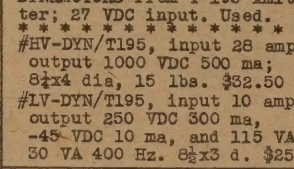
INPUT: 24 VDC 36 A. 750 VA. OUTPUT: 115 V. 400 CYCLE 1 PHASE 500 VA & 26 V. 400 CYCLE 1 PHASE 250 VA. SIZE: 12x8 1/2 x 8; WT: 25 LBS. PRICE: Used, \$39.50

## INVERTER INPUT 27.5VDC 60A

OUTPUT 115 V 400 CY 750 W 3 PHASE 26 V 400 CY 50 W 1 PHASE SIZE 11x10x6; WT: 40 LBS. LELAND#10285 used \$34.95

## WINCHARGER 51S1 DYNA-MOTOR on 15x9 1/2 base.

Input 26 VDC 22 amps; output 1500 VDC 200 ma and 330 VDC 100 ma. 44 lbs sh. Used, \$20. DYNAMOTORS from T-195 xmitter; 27 VDC input. Used. \*\*\*\*\* #HV-DYN/T195, input 28 amps output 1000 VDC 500 ma; 8 1/2 x 4 dia, 15 lbs. \$32.50 #LV-DYN/T195, input 10 amps output 250 VDC 300 ma, -45 VDC 10 ma, and 115 VAC 30 VA 400 Hz. 8 1/2 x 3 d. \$25.



JACK & HEINTZ F-132 INVERTER INPUT 27.5 VDC @ 100 AMPS. OUTPUT 115 V. 400 CYCLE 1500 VA 3 PHASE SIZE: 16 x 11 x 7; WT: 55 LBS PRICE: USED \$75.00

## F-147 INVERTER

INPUT 27.5 VDC @ 180 AMPS. OUTPUT 115 V. 400 CYCLE 2500 VA 1 PHASE SIZE 18x11x7; WT: 45 lbs PRICE: USED \$75.00



JACK & HEINTZ INVERTER #AN-3532-2 INPUT 27.5 VDC @ 20 AMPS. OUTPUT 115 VOLT 400 CYCLE, 3 PHASE, 250VA VOLTAGE REGULATED. SIZE: 12x7 1/2 x 4 1/2; WT: 20 LBS. FED#6125-617-0967 Used, \$18.95

## 1000 VDC 350 MA

BD-77 DYNAMOTOR; INPUT: 14 VDC 39 AMPS. OUTPUT: 1000 VDC 350 MA. SIZE: 11x10x6 1/2 SHPG. WT: 40 LBS. \$19.95

PE-73 DYNAMOTOR; SAME AS BD-77, BUT WITH 28 VDC 19 AMP INPUT, RECOND. \$30.00

DM-42 DM-42 DYNAMOTOR; INPUT: 12 VDC 39 AMPS. OUTPUT: 1030 AND 515 VDC @ 215 MA. 7x7x11; 42 LB. RECOND. \$15.

VIBRATOR POWER SUPPLY, USED WITH AN/PIP-1A PUBLIC ADDRESS SYSTEM. INPUT: 5.2 to 6.2 DC VOLTS; OUTPUT: 300 VDC 60MA, 50 VAC. SIZE: 4 1/2 x 3 1/2 x 3 LBS #H17VD-11077 NEW \$5.95

PE-104 POWER CONVERTER. 6 OR 12 VDC INPUT, OUTPUT 90 VDC, 1 1/2 VDC AND -45 VDC. SIZE: 4x4x7; WT: 10 LBS. NEW \$3.95 w/EXTRA VIB. \$4.95

## PP-855/PRC-14 VIBRATOR POWER

SUPPLY WITH FILTER NETWORK. 6 VOLTS DC INPUT, 5.35 AMP OUTPUT 135 VDC @ 155 MA. SIZE: 7 1/2 x 2 1/2 x 2 1/2; WT: 3 LBS. NEW \$4.95

PP-1234/T 115/230 VAC POWER SUPPLY for URM-32 freq. meter; output 180 VDC 20 ma, 6.3 VAC 1.1 amp. Xformer 460 VCT 20 ma, 6.3 V 1.25 A.; Choke dual 20 Hy 20 ma. W/6X4 tube. 12x3 1/2 x 12 lbs sh wt. Used, \$14.95

## HIGH VOLTAGE

ACE HIGH VOLTAGE POWER SUPPLY; OUTPUT: 3000 VDC 50 UA APPROX. INPUT: 115 V. 60 Hz. Uses TWO 1B3 RECTIFIER TUBES. WITH MOUNTING FLANGE. SIZE: 6x7x2; SHPG. WT: 8 LBS. UNUSED. #ACE-HV3000, \$5.95 SPECIAL!! 2 FOR \$10.00

## 12 V DC SUPPLY

PS601301 TRANSISTOR REGULATED POWER SUPPLY, output +12 V 2.7 A and -12 V 1 amp with OVP. Also -6.8 V 300 ma out. Schematic included for 115 or 230 VAC operation. 9 1/2 x 5 1/2 x 7, 16 lbs sh wt. Used, \$12.00

PP-18 CONVERTER 12 VDC 4 AMP TO 24 VDC 1.5 AMP. PARALLEL FOR MORE CURRENT. WITH VIBRATOR ALSO PLUG SIZE: 6 1/2 x 5 1/2 x 8 1/2; WT: 10 LBS. NEW \$4.95



## TUBE SOCKETS

4X150 SOCKET PAIR f/ T-195 xmitter modltr 4x3x2, #T195/4X150 Removed, \$12. \$10.

4-125A 4-400A

CERAMIC SOCKET, 2-7/8" square; removed from equipment. JOHNSON 275, \$6.50 each. CHIMNEYS for SK600/610 or 124-110 (4X150/4CX250); used. #SK606/124-111, \$3.00 ea. 2/\$5.

OCTAL MOULDED 2 HOLE MTG. \$ .35 " RING " .35 " CERAMIC (SPECIFY) .60 LOCTAL MOULDED 2 HOLE .35 CERAMIC TYPES 4,5,6 & 7 CONTACTS STANDARD SIZES .65 MOULDED TYPES 4,5,6 & 7 CONTACTS, STANDARD SIZES .45 MINIATURE MOULDED 7 & 9 .35 " CERAMIC 7 & 9 .50 SHIELDS FOR MINIATURE TUBE .40

GIANT 4 CONTACT CERAMIC FOR 211/VT-4C, 872 ETC. GE#ML7461594-G1 USED .49 GIANT 4 CONTACT CERAMIC FOR 715,718 ETC. JOHNSON 234 TYPE STK.#227684.98 UNUSED \$1.25 CERAMIC FOR 829 ETC. used 1.25 " 832 ETC. used 1.25

CERAMIC for 811/866 used \$1.50 CERAMIC f/813, #123-237 NEW \$5. JOHNSON CERAMIC SOCKETS, unused #214 for 750TL/1500T etc \$2. #244 for 800S etc. \$2.00 #247 for 829B, 7094 \$2.00

EIMAC SK-113 GETTER CLAMP f/4" dia tube base NEW \$45 #122-101-207 for 826/829/832/4D32; VHF septa, \$3.25 #124-0113 SCREEN GRID BYPASS for 4X150/4CX250; 2000 pf, \$3.

TERMINAL BLOCKS--TELEPHONE TYPE #TT4X10F4A, 4 rows ten terminals each; total 40. Size: 3x2x3; unused \$4.25 WE 4x10, used \$2.25 #660089, 3 rows 26 removable terminals; 78 total. 7x2x3 \$4.50

WE 2-rows 25-term; used \$2. 4E9865 40-term, flat mt. \$2.

879-9661 3 rows of 30 terminals one side wire wrap. size 8-7/8x2-3/4x1-3/4 \$3.50

AIRCRAFT STYLE TERMINAL STRIPS AN-3436-2-6 6 term. 4x7/8x11/16 6-32 studs on 19/32 centers .55

AN-3436-2-9 9 term 6x7/8x11/16 6-32 studs on 19/32 centers .75

AN-3436-4-10/10 term. 7-7/8x1x1 10-32 studs on 3/4 centers .80

AN-3436-4-16/10 term. 12x1x1 10-32 studs on 3/4 centers \$1.25

5BK-22 BOX Consists of 3 AN-3436 terminal strips 13 term. each & 2 AN-3436 9 term. ea. The 10/32 studs extend thru. the phenolic board and have solder terminals. Board size 5x8x2; 4lbs \$2.75

TERMINAL STRIPS WITH CLIPPED WIRE

BARRIER TERM. STRIPS AVAILABLE, 3/4, 1 & 1 1/2" WIDTHS, 2 to 16 TERM INALS. Two Terminal 20% EA. EACH ADDITIONAL TERMINAL 3%. WE WILL SHIP CLOSEST TO YOUR ORDER.

HEAVY DUTY TERMINAL STRIPS. APPROX. 2" WIDE. 6 TERM. 4x11.50 12 TERM. WITH 8 " 6 " 2.00 SCREW DOWN 12 " 8 1/2 " 3.00 HOLDER TYPE \$4

## Capacitors

3500 VDC 53.3 MFD, 10x4x3x3; 11 lbs sh. #4W3081, NEW, \$25. 6/\$150. Oil capacitors, removed from equipment:

MFD	VDC	SIZE	PRICE
4	400	2x1x1	\$ .75
2	600	2x2x1	.75
4	600	3x2x1	.95
6	600	4x2x1	1.20
7	600	4x4x2	1.35
10	600	5x3x1	1.65
1.5	1000	4x1x1	.85
2	1000	4x1x1	.95
4	1000	4x2x1	1.35
10	1000	5x3x1	2.50
2	1500	4x2x1	1.15
4	1500	4x3x1	1.95
6	1500	5x3x2	3.00
10	1500	5x3x3	4.00
4	2000	5x3x2	4.00
12	2000	7x4x3	12.00
0.6	3000	6x2x1	1.25
1	3000	4x3x2	1.25
2	3000	5x3x3	2.00
0.84	4000	5x3x1	2.25
2	4000	7x4x3	4.75
3	4000	9x4x3	7.50
2x0.1	4500	5x3x1	1.50
0.65	12500	14x8x4	12.00
0.75	20000	16x16x4	\$22

## COMPUTER GRADE

MFD	VDC	SIZE	PRICE
24000	3	4x3	\$ .75
23000	7	5x1x1	.60
		Bank of five 2.25	
61000	10	4x2x1	1.50
150000	10	5x3x1	3.25
28000	15	4x2x1	2.00**
73000	15	4x3x1	3.00
5200	20	3x1x1-3/8	1.25**
40000	20	4x2x1	2.75**
52000	20	6x3	2.85**
18000	25	4x2x1	2.00**
18500	30	4x3x1	2.00
25000	30	4x3x1	2.25
54000	30	6x3	4.00
18000	35	4x3x1	2.50
25000	35	4x2x1	2.75
37500	35	6x3	3.75
9400	40	4x1x1	2.00
51000	40	5x2x1	4.15**
51000	40	4x3x1	4.25**
76000	40	5x3x1	4.75
1000	50	3x1x1	1.20**
23200	50	4x3	3.25**
3500	55	4x3	2.00**
20000	55	5x3x1	3.25**
58000	20	6x3	2.20**
22000	75	5x3	5.25
950	75	4x3	2.00
15600	75	4x2x1	4.50
16800	75	4x2x1	4.75
1400	99	4x2 dents	1.00**
2700	300	5x2x1	5.00
900	165	4x2 dents	1.00**
1250	180	4x2x1	3.00**
500	200	4x2 NEW	2.25
500	200	5x3x1	1.00**
1700	200	5x3x1	3.20
1000	350	5x3x1	3.75
5200	200	6x3	7.50

\*\* marked, take 25% OFF. BUY 5 COMPUTER GRADES OF SAME rating, take 20% off.

PHOTO FLASH TYPE, 600 mfd 360 VDC. 3x1x1 \$2.25 5/\$10.

MICA CAPACITORS used .01 600 55 in RF power .02 600 55 circuits. .022 1200 60 JAN CM-size .0004 2500 55 less than .006 2500 55 1x1x1-3/8 .016 2500 60 \$1.25; 5/\$5. 35 pf 3500 55 .01 1200 45

COMPUTER GRADE ASSORTMENT, 10 capacitors in ranges 5-30 VDC 1K-50K mfd; takeouts Approx 10 lbs, \$5.00 \$4.00

## ROTARY SWITCHES

1-POLE 17-POSITION, 2 1/2" dia bakelite; 3/8x1 1/2" dia shaft. CRL #PAB001 NEW \$1.95; 2/\$3

ROTARY SWITCH, 2-DECK. ONE 4PDT MOMENTARY BOTH SIDES; OTHER 2PDT MOM. B.S. AND 1PST MOM. 1-3/8" DIA.; CERAMIC. #329825-20, \$1.00

MINI-ROTARY, 1-pole 3-pos. shorting. 1" dia; 1/8" dia shaft. No hardware. #LED-M13-S, unused, 75¢

THUMB-WHEEL WAFER SWITCH, 18 POSITION, NUMBERED, 2 HOLE MTG. HORIZONTAL OR VERTICAL, 2x3/8" # 960 NEW \$1.25 SAME AS ABOVE 10 POSITION 2x3/8" #980 NEW \$ .75

2-DECK 5-POS w/OFF-ON switch 2/SPST 8 A 125 V. 2x1 1/2, 1/2" d shft. #2D5PSW \$3.

MALLORY NON-SHORTING TYPES: #3254T 3-circuit 4-pos \$1. #3243T 4-ckt, 3-pos. \$1.10

2-DIGIT THUMB SWITCH 00 to 39; can be modified to 99 but one digit has 1-pole 10 pos wafer, other binary code output. Digitran Serie 23000; 1x1x1 1/2. NEW \$1.75

Rotary switch one deck 17-position, one tie deck. 1 1/2" x1. silver pl. SW-249 \$2

1-POLE 12-POS non-shorting; 1 1/2" dia X 2" lg shaft. Mallory #32112J NEW \$1.25

## DAVEN SWITCH

18-POSITION, CONTINUOUS TURN, 2" dia. Zinc-silver contacts. 2x2 1/2" dia shft. #329825-92.2 Unused, \$3.00

Miniature tap switch 1 pole 7-position rated 1 amp. 1x1 1/2. Grayhill 7 pos. \$2.00

CERAMIC TWO DECK, 1-pole 4-position/deck (90 throws); 2x1 1/2" dia shaft, 1 1/2" dia wafers. #83-2-1P4P, \$1.75

Ceramic 5 pole 3-position, 2 deck rotary 2"x1 1/2". used Re-moved S-602/13 \$1.50

Ceramic 1 pole 12-position rotary sw. 1 1/2" dia. w/stop. re-moved S-601/13 \$2.00

3-DECK 1-POLE 11-POSITION/deck; 1-3/8" dia bakelite wafers, 1 1/2" dia shaft. #5930-544-2513, unused, \$2.95

DUAL CONTROL SWITCH, 1/2" dia outer shaft switches 1-pole 4-position rotary; 1/8" dia inner shaft adjusts 50K ohm pot w/on-off. #5540 NEW \$2.

ANTENNA CIRCUIT SWITCH 100 WATT 3/MAKE 3/BREAK Size: 4x2x3 IN. #329626 \$2.50

ATTENUATOR NETWORKS #ATT/SG15, balanced "H" 600/600 ohm; 0-70 db, eight steps. Used \$8. #T-4095, "W" 600/600 ohm 0-50 db, 1 db/step. \$12.

## Parts Kits

DISC CERAMIC CONDENSERS 33 ASST. 15MMF-.61MFD. Good Value \$1.25 a KIT

HARDWARE ASSORTMENT from electronic equipment such as washers, screws, rivets, nuts, terminals; 2 lbs \$2.00

MICA CONDENSERS 25 ASST. 10 MMFD TO 6800 MMFD. \$1.00 a KIT

TRIMMER CONDENSERS 25 ASST. 3 to 280MMF WIDE RANGE \$1.00 KIT.

PRECISION RESISTORS 25 asst. on boards. Carbon or wire wound 1%. \$1.50/kitt

RESISTORS WIREWOUND 25 ASST.

5 to 20 Watt Wide range of values some tapped. 25 ASST \$1.00

VOLUME CONTROLS 10 ASST. Popular Values \$1.00

TUBE SOCKETS 20 ASST. Octals Locals Minatures Wafers etc \$1.00

PILOT LIGHT SOCKETS 25 ASST Bayonet Screw etc. \$1.00

TERMINAL STRIPS, Tie lug strips, ASST types. 25 for \$1.00

TERMINAL LUGS, ring spade, crimp types. Wide variety of sizes for all uses in plastic box, APPROX. 200 PCS. \$2.00

ROTARY WAFER SWITCH six different types Multi-decks and contacts \$1.25

BATHTUB CONDENSERS KIT .1 to 1 mfd up to 600 VDC. Various types 10/\$1.

MORE CAPACITORS Polystyrene 100/\$15. .01 uf 200 V, 4/\$1. .009 uf 500 V, 4/\$1 Mylar types: .022 uf 100 V, 4/\$1 0.33 uf 400 V, 5/\$2.

## AC CAPACITORS

MFD	VAC	SIZE	PRICE
4	220	4x1x1 1/2	\$1.00
14	220	4x2x1 1/2	2.25
47-58	220	4x2x1 1/2	2.25
3.9	330	4x2x1	1.00
4	330	6x2x1 1/2	1.00
7	330	3x3x3 1/2	1.35
17.5	330	5x2x1 1/2	2.50
12.5	360	4-3/8x2x1 1/2	2.00
2	440	2x2x1 1/2	1.00
25	440	6x3x3 1/2	4.00
48	480	10x4x4 1/2	8.00
21	525	6x3x3 1/2	4.00
18	600	4x4x4 1/2	4.00
4	660	3x3x3 1/2	1.25
6	660	5x3x1 1/2	1.50
12	330	5x2" dia	2.00
1.3	950	5x4x1 1/2	3/1.00
0.5	2500	2x2x1 1/2	.65
1.3	4000	8x4x3 1/2	4.00

## ELECTROLYTIC (E)/PAPER (P)

6800uf 16 V axial (E) 4/\$1 450 uf 25 VDC (E) 50¢ 5/\$2 1000 uf 25 V axial (E) 50¢ 1500 uf 63 V axial (E) 75¢ 50-50 uf 150 V (P), 2/\$1. 50-50 uf 150 V (E), 45¢ 80-40-20 uf 150 V (P) 2/\$1 250uf 150 V axial (E) 2/\$1 25-25 uf 200 V (E), 45¢ 60 uf 250 VDC axial (P) 50¢ 160 uf 250 VDC (P), \$1.10 160-240-240 uf 200 V \$1.65 140 uf 300 V axial (P) 85¢ 50 uf 350 V axial (P) 65¢ 100 uf 450 V axial, \$1.50 30 to 40 uf 500 V (P) \$1.25 0.01 uf 7500 V (E), \$3.50 160-240-240-5 mf 200 VDC case ground; (E), \$1.00 1 KV DISCS: 7/31. 1C/\$6. UR: .0001 .0002 .002 3 KV DISCS: 5/31. 1C/\$12. UR: .00009 TANTALUMS, 35 VDC PCB-type 4.7 or 6.8 uf 4x1 1/2 \$20 40 uf 25 V, 2x3/8, 2/\$1. 47 uf 20 V, 1x2, 45¢ 20 uf 50 V, 1x3/8, 2/\$1.

## RESISTORS

3/5 W, 20¢ EA; 10/25 W, 30¢ 0.33 Ohm 11 watt WW Dale 0.5 " 10 " " 2.0 " 10 " " 2.43 " 3 " " 10 " 8 " " 30¢ 24 " 5 " " 70 " 5 " " 100 " 5 " "

## BLEEDER RESISTORS

3900 " 25 " , FERRULE 1000 " 25 " , WW 15K " 10 " , " 15K " 3 " , " 100K " 20 " , CERAMIC 1.6 OHM 220 W, 5%, \$1.50 0.05 " 105 W, 5%, 4x1, \$1.

PRECISION RESISTORS 5K OHMS 1/2 WATT, 0.1%, 60¢ 7.5K OHMS, 0.333 WATT, 0.25%, WIREWOUND, 40¢ EA. 28K OHMS 1/2 WATT, 0.05%, WIREWOUND, 40¢ EA. 55 MEGOHMS, 10 WATT, 1%, DALE WIREWOUND, \$1.00 EA.

DALE PRECISION POWER RES. 100 WATT (3x3x1 1/2) IN VALUES: 450oh(1%), 1400oh(1%), \$2.50 250 WATT (4x3x2 1/2) IN VALUES: 600oh(1%), \$3.00

25 OHMS 100 W 5% Dale \$1.50 1 OHM 150 W, 5% Dale, \$2.25 6.8 OHMS 220 W, 10%, \$1.75

260 ohms 5 watt 1%, 2/\$1. 4K ohms 3 watt, 1% 2/\$1.00 5K ohms 100 W, 6x1x1 1/2 \$1.25 75 ohms 50 W, 5%, 4x5/8 \$1. SLIDER VARIABLE WW RESISTOR 15 ohm 35 watt, 10%, \$1.00 10 ohm 75 watt Ohmite \$1.50

MINIMUM ORDER \$5.00



## HIGH VOLTAGE TRANSFORMERS

PRI	HZ	SECONDARY	SIZE	WT	STOCK #	PRICE
117v	60Hz	375v 40ma 2/6.3	.6A 2x4x2 1/2	4 lbs	#24003	\$3.95
105/115/125	780 VCT	65 ma 5x5x4 1/2	15	#A3499		\$5.95
200/225/250	60 Hz	6.3 VCT 4 A, 5 V 2 A				
115	60	350 ct/26 ma 2x3x3 3/4	4	647-6762		3.95
		5/3.0 A				
115	60	1470 VCT 126 ma 5x6x4 1/2	16	#556-9885		\$14.95
		(2640 MWV), 6.3 V 2.5 A, 6.3 V 0.4 A				
115/230	60	750 VCT 110 ma 4x5x4 1/2	9	TF1A03YY/		
		6.3 V 3.6 A, 5 V 2 A		SG15		7.95
115	60	110v/100ma 50vct 4x3x3 3/4	10	KAL#2334		6.95
		.5A, 25vct, .15A.				
		14vct 2.5A.				
115	60	600 VCT 60 ma 2x4x2 1/2	3 lbs	#1831		5.95
		6.3 V 1.5 amps				
115	50-	550 VCT 12 ma 2x4x2 1/2	5 lbs	#37711		3.95
		400 Hz 60 VCT 300 ma 6.3 V 600 ma				
108/115/	700 VCT	50 ma 3x5x3 3/4	11 lbs	#12314		5.95
121	VAC 60 Hz	5 V 2 A, 6.3 VCT 3.5 A				
115	60	820 VCT 120 ma 4x4x4 1/2	10	#7629831		6.95
		5 V 2 amps				
115	60	1000 VCT 220 ma 5x4x4 1/2	20	#TL/610		\$10.95
		2.5 VCT 5 A, 5 VCT 3 A (1750 V insul)				
120	60	6.4/1A 3/6.4 .3A 2x3x2	1	645-0612		2.25

115/60Hz	360Vtaps/7/332/346v.	125ma 228v.015				
	6.6vct 4.2A	4x5x3 1/2	12lbs.	#7489394		\$3.95
115/230 60	175 V 85 ma 2x4x4 1/2	5	#2Z9612-382			4.95
	or 50.8 V 95 Hz vibrator input					
115/230 60	1475 VCT 500 ma 5x4x4 1/2	32	#TED-5694			\$22.
	1070 WV, 6.4 V 1 A, 5 V 5 A, 19 V 1 A					
115/60Hz	700vct .050A 5v3A 4x3x3 3/4	9	LBS#TF1A03Y			\$3.95
115 V 60 Hz	650 VCT 20 MA; 3x2x2 1/2	4 1/2	10	#8734		\$2.95
	6.3 VCT 2.5 A.					
115	60	6760 V 60 ma 11x8x6	35	#1000A-358		\$25.
	(25 KV test, insulators 3 1/2" high)					
115v 60hz	110v @ 30ma 3x2x2 1/2	31 lbs	#5569			\$3.95
	6.3 @ 3.2A.					
115	60	2000 VCT 500 ma 7x5x5 1/2	32	#HW-201P		32.50
115/230	660ct@60MA RD3x4 1/2	8	229608-110			5.95
	50/60 CY 6.3 @ 5 A (FOR TG-34 KEYS)					
115	60	700 VCT 70 ma 4x3x4 1/2	6	#152960		\$5.95
	6.3 VCT 3 A, 5 V 3 amp.					
208/230	940 VCT 600 ma 7x8x6	39	#234-0035			\$14.95

## LOW VOLTAGE TRANSFORMERS

PRI	HZ	SECONDARY	SIZE	WT	STOCK #	PRICE
115v	60Hz	6v/1A 45vct/.5A 3x2x2 1/2	2LB	#1461312		\$2.95
115/230 60	12.6 VCT 1.5 A	2x2x2 3/4	3	#519-8787		\$3.95
115v 60Hz	6.3v@15a/two 5x4x3 1/2	11 lbs	#4094			\$20.00
	6.3v@6/two-500a/.50/2/503					
115	60	27 V 4.3 amp, 5x5x5 15#	D161915			9.95
	2.6 V 3 A, 4.1/5/6.3 VCT 3 amp					
117v 60Hz	55v @ 60ma 3x4x2 1/2	41b	5950-8419			\$2.95
115	60	2.5 V 3 amp 4x4x2 1/2	5	#2-5V3A		\$4.50
115v 60Hz	6.5vct@24a/ 6x5x4 1/2	20	647-6219			\$9.95
	6.5vct@1a/two 6.5vct@6a					
220v 60Hz	2.5vct@2 4x3x3 3/4	9	THER-8708			\$3.95
	5vct @ 3a					
115	60	6.5 VCT 11 A, 4x6x3 1/2	16	#FT2550		\$8.95
	6.5 VCT 6.2 A, 5.2 VCT 4.4 A, 6.5 V 7.8 A					
115	60	24 VCT 50 VA 2x1x2 3/4	3	#BML1269001		\$5.50
115 50-400	34/2.7 A 4x4x4 1/2	14	853-6026			\$4.50
	3.0/250 MA					
115 50/60	51 @ 1.5 A RD.4x2 1/2	6	869-2849			\$4.95
	5 @ 1.0 A					
120v 6	3/6.3vct .6A 2x3x2 1/2	1LB	TF1A01YY			\$2.95
115 60	2.5 V 10 A 10 KV insl 4x3x1 1/2	8	#229611.144			\$8
117 60	31v@3.27A, 15.5v 3x4x4 1/2	10	5950-9195			\$3.95
	.51A, 23vct@.21A.					
	24v @ .85 A.					
215 V 60 Hz	2.5 VCT 10 A; 4x3x3 3/4	12	#2253			\$2.95

Pri: 115 VAC 60 Hz  
Sec: 375 VCT 90 ma  
2.5 V 10 amps  
5 V 2 amps  
6.3 VCT 10 A  
2.5 V 10 amps  
5x4x3 1/2, 10 lbs sh  
#TF1RX03YY/141 \$7.

Pri: 115v50/60hz  
Sec: 1860vct  
150 ma. 1500 wv  
5x4x4 1/2; 18 lb  
SMB202-909 \$15

Pri: 115 V 60 Hz  
Sec: 1120 VCT 400 ma, 950 VCT 150 ma. 6x5x8, 38 lbs. #TRC-29/  
SMB202-909 \$16.95

POWER SUPPLY TYPE  
115 VAC  
60 Hz  
primaries  
Unused  
#BML2696: 18 V 1.5 amp, 19 V 2.5 A, 10 V 4 A; 5x4x3 1/2, 7 lbs sh. \$4.95  
10 for \$45.00

#PT-09: 48 VCT 2.5 amps; 3x3x3 1/2, 6 lbs sh. \$5.95

#PT-1602: 78 VCT 3 A; 3x4x3 1/2, 10 lb \$6.95 ea; 10/\$64.

#TRA-1577: 15 VCT 3 amp, 5 V 1 A. 2x3x3 1/2, 4 lbs. \$3.95

#MMC-56: 50 VCT 3A 3x3x3 1/2, 8 lbs. \$5.95 ea; 10/\$54.

### 10V 75 A

Pri: 220 VAC 60Hz  
Sec: 10 VCT 75A.  
Requires 6 mfd capacitor 660 AC 6x4x5 1/2; 24 lbs. #N66114781 \$18.95

Pri: 115v  
60 CYC  
Sec: 2 V.  
30 AMP  
3x3x4; 4LB  
5950-829-8618 \$2.95

### 100 WATT MODULATION TRANSFORMER

FOR RA-62 RECTIF. USED TO POWER SCR-522 REC-TRANS  
Pri: 110/220 VOLT 40-60 CYCLE  
Sec: DC VOLTAGES 300 @ 230 MA BIAS 150 @ 8 " 13.4 @ 3.9 A.  
5x5x8; 30 lbs. #3340-296-862-192  
PRICE: \$7.95

### FAIR XN-100 XFORMER

Pri: 115 VAC 60 Hz  
500 VCT 80 ma  
24 VCT 2 amps  
6.3 V 3 amps  
2x3x2 1/2, 4 lbs sh

ART-13 MODULATION TRANSFORMER 50 WATT 300-4000 RESPONSE 2 DB, PRI. TO SEC. 1/1.695, PRI. TO SEC. 2/1.254, Z PRI. 15000 Z SEC. 1 7300, TEST 4000 V. 4x3x2 1/2, 4 LBS. COLLINS#677N252 RE-MOVED \$3.95

Pri: 115 v. 50/60  
Sec: 3/17 v. 5 AMP 28 v. 10 "  
WITH CAPACITOR REQ. VENTILATION 4x5x7 1/2; 20 LBS. GE- 9T91A4074 \$11.95

Pri: 115 v. 50/60  
Sec: 100 VCT 1.5A 20 " 3.0A 2/20 v. 3.0A 35 v. 5.0A  
WITH CAPACITOR GE-9T91A4069 REQ. VENTILATION 5x6x7 1/2; 23 LBS. \$7.95

Pri: 115/230 VAC 50-60 Hz  
Sec: (12 V 14 A) by wiring 12 V secondaries in parallel) or 12 V 9 A, 12 V 3.2 A, 12 V 2 amps; also 44 V 2.5 amps. 5x4x4 1/2; 22 lbs #P-601719, \$7.95

### 100 WATT MODULATION TRANSFORMER

100 Watt RESPONSE 200 to 5000 F/B-191/375 TRANS. Size 3x4x5 WT. 5 1/2 lbs. Stock # 206191/11 Price \$3.95

### 100 WATT MODULATION TRANSFORMER

Pri: 7500 OHM CT 30,000 "H  
SEC: 3000 OHM 35W 200 MADC 600 CT. 1 W RMS TEST 1,2,3 500 V. OTHERS 2500 V. 200-3500 CPS. 4x4x4 1/2; 11LBS #5950-646-3092 PRICE: \$4.95

### MADE FOR ARC-5

ARC-type 12, BC-639, R-174, & other receivers. NEW \$12.95

## TRANSFORMERS LISTED BELOW HAVE 115 VOLT 60 HZ PRIMARIES UNLESS OTHERWISE STATED

Sec: 18 V 5.4 A, 26 V 1 A, 6 V 900 ma, 25 V 500 ma, 35-10-0-10-35 V 5 A. 4x4x4 1/2, 16 lb #401-21 unused \$8.95

Sec: 40V 2.5A/6.3V 1.5A 3x3x3 1/2; 10 LBS. #43278 \$4.95

Sec: 250 V tapped 50 V 120 ma, 4 KV test. 4x6x3 1/2, 9 lbs sh. #BF-18587 used \$6.95

Sec: 30 vct 560 ma 40 vct 450 ma 2x2x2 1/2; 2 lbs. #401-6 \$3.00

Sec: 450 VCT 250 MA. 40 VCT 1 A. 2/6V 1A. SIZE: 3x3x3 1/2; 9 LBS. URC#702-704-00 \$6.95

Sec: 50v@100ma/3v@100 MA/40v@1.5A/40v@200MA SIZE: 2x2x2 1/2; 2 1/2 LBS. URC#372993-1 \$3.95

### 22 VCT 75 A

Pri: 115 VAC 60 Hz  
Sec: 22 VCT 75 AMPS 5x6x6 1/2; SH WT: 46 LBS. #NCR8318001, \$40.00

Pri: 115 VAC 60 Hz  
Sec: 32 VAC 4 amps Suitable for 24 VDC regulated supply. 3x3x3 1/2, 5 lb #4892-83 NEW \$4.95

CHARGER TRANSFORMER, 230 VAC 60 Hz primary with 8-taps to produce 12 to 40 VCT 50 A secondary; usable on 115 VAC input with reduced output. 5x6x6 1/2, 33 lbs. #XT-885/240 \$32.

Pri: 115 VAC 60 Hz  
Sec: 24 VCT 50 amps 5x6x5 1/2, 28 lbs sh. #RAY3001, NEW, \$36.95

### 24 VCT 35 A

Pri: 115/120/125 VAC 60 Hz 1 Ø  
Sec: 24 VCT 35 AMPS 5x5x4, 19 lbs sh wt. Wabash #4429 NEW \$30.

Pri: 115/230 VAC 60 Hz  
Sec: 30 V 4 amps, 11 xk-190 \$8. 20 V .5 A. 3x2x2 1/2, 8 lbs.

Pri: 115 VOLT 60 HZ. SEC: 130 VCT @ 200 MA SIZE: 3x2x2 1/2; 2 LB. URC#8316423 \$2.50

Sec: 26.8 vct 1 A. 2x2x2 1/2, 2 lb. #401-17 \$3.

Pri: 210-250 v. 50/60 Sec: 13.7 v. @ 1 amp. 6.5vct @ 4.75 amp 4x3x3 1/2; 10lb 229600-84 \$10.00

Pri: 220/220 VAC 60Hz Sec: 260 VCT 200 VA 4x4x6, 17 lbs sh wt. #8034, unused, \$9.95

Sec: 175 vct 100 MA. 75vct 200 MA. 80 VCT 100 MA. & 5 v. 200 MA. SIZE: 3x2x2 1/2; 2 LBS. URC#720660-1 \$2.95

Pri: 105/115/125V 60Hz Sec: 285/300/315 V @ 300 ma & @ 150 ma. 4x6x4 1/2 15 lbs. RA342 \$6.

Sec: 40 VCT 1 A. SIZE: 3x1x1 1/2; 1 1/2 LBS. URC#56000 \$2.95

Sec: 24V2A/6.3@100MA 24@100MA. SIZE: 3x3x3 3/4 4 LB. URC-LT-646 \$4.95

Sec: 36 VCT 200 MA. 45 VCT 100 MA/2.5V30M. SIZE: 2x1x1 1/2; 1 LB. URC#374501-1 \$2.95

SIGNAL TRANSFORMER  
Pri: 2/115 VAC 60 Hz  
Sec: 2/6.4 VCT 12 amp 4x3x3 1/2, 7 lbs sh. #DL-12.8-12 NEW \$14.95

### 2/28 VCT 8 A

Pri: 2/115 VAC 60 Hz  
Sec: 2/28 VCT 8 amps. Wire for 56 VCT 8 A, 28 VCT 16 A, or 14 V 32 A. 4x5x2 1/2, 17 lbs. Signal #DL56-8, \$25.

Sec: 125 V tapped 90 volts 3 amp. 4x4x3 1/2, 10 lbs. #225-3992, \$12

### 22 VCT 3 A. 80 VCT 1.5 A.

Pri: 100, 115 v. 60 HZ. Sec: 22 vct @ 3 AMP. 80 vct @ 1 1/2 " SIZE: 3x3x3 1/2; WT: 8 LBS #3S92890015 \$4.95

ISOLATION, 230 V 50/60 Hz to 115 V 435 ma. 3x4x3 7 lb. #3436 \$5.

VIBRATOR TRANSFORMER  
Pri: 12.6 V 115 Hz  
Sec: 160 V 160 ma 2-1/8x2x3 1/2, 4 lbs #5950-243-5679, \$4.95

Pri: 115 VAC 60 Hz  
Sec: 460 VCT 50 ma 6.3 VCT 2 amps 3x2x2 1/2, 4 lb. #7514 \$4

Pri: 115 VAC 60 Hz  
Sec: 32 V 2.5 amps 3x3x2 1/2, 3 lbs sh. Stancoor #8811 used \$4.

Pri: 115 VOLT 60 HZ. SEC: 35 VCT @ 1 AMP. 6 v. @ 300 MA. SIZE: 2x2x2 1/2; WT: 3 LB. URC#1341155-2 \$2.50

Pri: 115 VAC 60 Hz Sec: 45 VCT 500 ma 6 V 500 ma URC#203A6725-10 \$2.50

Pri: 115 VAC 60 Hz Sec: 500 VCT 100 ma 6.3 V 1 amp Size: 2x2x2 1/2, 4 lbs. #URC8316213 \$3.95

Sec: 500VCT 35MA/24V.9A 6.3v.9A/6.3v. .3A/4LBS. 3x3x3 1/2; #RM13-317 \$2.95



# TRANSFORMERS

## 40 VCT 3 A

22 V 18 A

Pri: 100/115 VAC  
Sec: 40 VCT 9 amp,  
22 V 18 amps.

5x16x16, 32 lbs.  
#7213-4112, \$15.

As above, but sec  
39.8 VCT 8.5 A,  
22.7 V 12 amps.  
#5602-1500, \$12.



Pri: 115 V 60 Hz  
Sec: 15 V 3 A;  
13 V 2 A;  
6.3 V 7 A.

WITH CAPACITOR,  
4x3x3x3, 13 lbs.  
#PV-175-9, \$5.95

## AUDIO

Pri: 60K/12.5K  
Sec: 8/600 ohms  
200-3000 Hz 200  
MW; 1x1x1x2, 2  
lb. #T14/RL74 \$4

Pri: 13000 ohm CT  
Sec: 25/1000Ω CT  
200-3500 Hz; 3x  
3x2x2, 3 lbs sh.  
#T2/SG-15, \$4.50

Pri: 600 ohms  
Sec: 5000 ohms CT  
1000-4000 Hz; 1x1  
x2x2, 3 lbs sh.  
#229631-248, \$3.50

Pri: 250/4000 ohm  
Sec: 150, 600Ω CT  
400-3000 Hz; 1x1  
x2x2, 2 lbs sh.  
#C-280/RM-39 \$3.

Pri: 16000 ohm CT  
Sec: 600 ohms CT  
1000-4000 Hz; 2x1  
x1a, #CV2/T4 \$3.50

Pri: 16570/4170/  
1040 ohms to  
Sec: 8 ohms.  
60-8000 Hz 4.5 W  
#229637-94, \$4.

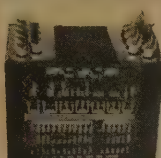
Pri: 7000 ohms  
Sec: 4000 ohms tap-  
ped 250 ohms; 200-  
8000 Hz. 1x2x1x1,  
1 lb. #247-9266 \$2.

DRIVER/OUTPUT AUD-  
IO, Driver: 5650  
ohms CT to second-  
aries 2.6:1 and  
40:1 CT. OUTPUT:  
5250 ohms CT to  
500 ohms & 4 ohms;  
8 W. 2x2x1x2, 3  
lbs. #T504/CV2, \$4.

## AUDIO MATCHING

OUTPUT TRANSFORMER  
Pri: 5000 ohms  
.015 ad Sec; 200  
& 4 ohms, 1-10 kc  
-30dBm. 2x2x2x3  
1x1lbs \$3.95  
5950-645-1855

INPUT TRANSFORMER  
Pri: 150 ohms CT  
Sec: 150,000 ohms  
100-8000 Hz 1.5mw  
2x1x1-7/8 dia, 1  
lb. #5535, \$3.50

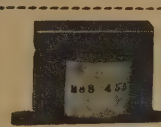


1-177  
TUBE CHECKER  
TRANSFORMER  
SIZE: 4x4x4, 5x1b  
STK. #229613.667  
PRICE: \$4.95



Pri: 26/115/230 V  
60 Hz.  
Sec: 13 V. 8 AMPS  
TWO 230V WINDINGS  
TO SUPPLY 370 VDC  
600 MA.  
5x5x5x5; 22 lbs.  
229613.514 \$7.95

Pri: 115/230V 60Hz  
Sec: 12/24 V 4/2 A  
2x2x2x2, 2 lbs sh.  
Stancer P6377 \$5.



ALL PRIMARIES  
115 VOLT 60 CYCLE

Sec: 6v. @ 500 MA.  
1x1x1x1; 3 oz.  
URC#137B648 \$1.25

Sec: 6.3 v. 1 amp  
1x1x1x1; 4 oz.  
BE16073-001 \$1.50

Sec: 6.3 VCT 2 amp  
2x2x2x2, 1 lb.  
Stancor P-2945 \$3.

Sec: 2/30 v. 250 M  
2x1x1x1; 4 oz.  
URC#60605 \$1.50

Sec: 6.3 VCT 1.5 A  
2x2x2x2, 1 lb sh.  
#F-16X, NEW \$1.95

Sec: 12 V 2 amps  
2x2x2x2, 1 lb sh.  
#37-7622 NEW \$2.25

AUDIO BANDPASS  
2320 Hz peak, 1285-  
4200 Hz Band Width;  
Pri: 600/250 ohms  
Sec: 120000 ohms  
2x2x2x4, 4 lbs sh.  
#321892-19, \$4.95

MIC TRANSFORMER  
Pri: 50 ohms 30 ma  
Sec: 500 ohms, 400  
to 1900 Hz. 1x1x1  
x1x2, 1 lbs sh.  
#T204/PP-115 \$2.00

Pri: 500 ohms CT  
Sec: 500 ohms CT,  
600-12000 Hz; 2x2x  
x2x2, 2 lbs sh wt.  
#T203/PP-115 \$2.00

INPUT TRANSFORMER  
Pri: 500 ohms  
Sec: 20000 ohms CT  
150-3000 Hz 0.4 W  
1-5/8x2-3/8x1-5/8,  
1 lb. #55C162, \$3.

## LOW VOLTAGE TRANSFORMERS

ALL PRIMARIES 105/110/115  
120/125 VOLTS 60 CYCLE.

Sec: 6.6 v. 18 AMP  
3x5x3x4; 12 lbs.  
GE#9T35Y159 \$4.95

Sec: 6.3v 2.75A/6.3  
V 5.5A, 2.5 KV test  
5x3x3x3 #7629805 \$6.

2.5 VCT 10 A, 10 KV insula.  
5x3x3x3 7 lbs 2Z9621-201 \$4.

Sec: 8 V 50 VA; 2x3x2x2,  
3 lbs. #9861, NEW, \$3.95

Sec: 6.3 VCT 3 A 2.5 KV tes  
3x2x2x2, 3 lbs. #F-6446 \$4.

Sec: 6.3v 3.1a/6.3v 2.5a/6.3  
v. 4.5a/6.3v 3.0a/2-5.0a2 amp.  
TF1A01JA \$3.95

Pri: 100-130 VAC 60 Hz  
Sec: 6.3 V 25 A; 11x5x3x5x2,  
28 lbs. SOLA #302237, \$12.

Sec: 6.3 VCT 5 amps 300 W;  
2x3x3-3/8x2-3/8, 5 lbs sh.  
#5950-539-6765 NEW \$4.95

Sec: 12.5 V 2 amp, 150 V  
2 A; 4x3x3x4x2, 13 lbs sh.  
#773605, unused, \$6.96

Sec: 6.3 vct @ 3.4a/6.5vct  
@ 13.7a/5.2v @ 6.3a/5.2v @  
2.1a. 4x3x3x6; 15 lbs.  
TRC-SMB-202910 \$6.95

Sec: 6.3 VCT 3 A; 3x3x2,  
3 lbs sh. #F-18X NEW \$2.95

Pri: 210/220/230/240V 60 Hz  
Sec: 5 VCT 10 amp. Stand of  
insul: 1x1. Wilcor 96C Trans  
5x4x5; 10 lb.  
229600.42 Kenya 10694 \$10

Pri: 115 VAC 60 Hz  
Sec: 850 VCT 225 ma CT grad  
500 VCT 125 ma, 2/5 V 3 A,  
6.3 V 2.5 A, 6.3 V 1.25 A,  
6.3 V 11 A; 6x2x6x2x5x2, 25  
lbs. #188-7474, \$9.95

Pri: 115 v. 60 Hz.  
Sec: 900 vct 130 MA.  
5x5x3x2; 13lbs. 229612-38 \$8

## MODULATION

Pri: 8000Ω at 250 ma; sec  
2800Ω at 300 ma. 200 Hz-  
20 KHz 120 watts. 8x4x4x4  
30 lbs. #T201/MD-141, \$12.

Pri: 21000Ω, sec 8000Ω  
ct 250 ma, 150-3000 Hz 250  
W 7 KV test. 7x4x4x4, 28  
lbs sh. #229633/610, \$15.

FLATE TO PLATE, pri 15800Ω  
4500Ω 900 ma; sec 7500Ω  
535 ma, 400-3000 Hz. 11x8x  
x10x110 lbs. 568-4831 \$36

Pri: 115 VAC 60 Hz  
Sec: 6.5 VCT 24 A, 6.5 VCT  
6 A, 6.5 VCT 6.5 A, 6.5  
VCT 1 A; 6x5x4x2, 22 lbs.  
#5950-647-6219, \$14.95

ISOLATION, pri 115/230 V  
60 Hz; sec 115 VAC 1 amp  
2x2x2-5/8x2, 3 lbs. #A762-  
101, \$6.95 ea; 2/\$12.00

ISOLATION TRANS-  
FORMER, 110/115/  
120/210/220  
primary;  
Sec: 135 V 1 A  
6.3 V 5 amps  
Switch taps secondary 150/  
125/100/75/50 V no load  
from 115 V input. 3x2x2x4x2,  
7 lbs. #P-1261875, \$7.95

## HIGH VOLTAGE TRANSFORMERS

DC POWER SUPPLY  
Pri: 115v 60 CY  
Sec: -8000 V  
-25-1 MA.  
-120v @ 15 MA  
-24v @ 1.2 A  
-16v @ .45 A

SIZE: 4x4x9x3; WT: 15 LBS.  
#GE9T63Y2280G03 \$14.95

Pri: 105/110/115/  
120/125 VAC 60 Hz  
Sec: 1120 VCT 75  
MA, 365 V 150 MA  
tapped @ 535 V  
3x5x5x3, 8 lbs sh.  
#TF1A02JA-R \$5.95

Sec: 2600 V tapped 1600 V  
120 ma; 5-7/8x7-3/8x4x2, 25  
lbs sh. #R18584, \$14.95

Pri: 115 VAC 60 Hz  
Sec: 900 VCT 250  
MA,  
4x4x4x3x3; 15 LBS.  
#SS-S-P243, \$7.95

Pri: 115/230 v. 60 Hz.  
Sec: 520 VCT @ 90 MA.  
6.3v/1x A. 6.3vct 4A.  
SIZE: 4x5x3x3; WT: 7 LBS.  
#TB1RX03LB/FGC-29 \$5.95

CHOKE FOR ABOVE 10/25 WY.  
125/15 MA. 4x3x3x4x2; 4 LBS  
#TF1RX04LB/FGC-29 \$5.95

Pri: 115v 60 hz  
Sec: 350 vct 25 ma  
5.0 3 amp  
3x3x3x2; 3x lbs  
229613.77 \$3.95

IGNITION TRANSFORMER  
Pri: 115 VAC 60 Hz  
Sec: 7000 V 3.75 ma  
4x5x4x2, 6x2 mtg; 10 lb  
#9T63Y3068G4 used \$8.

Pri: 115/230 V 60 Hz  
Sec: 920 VCT 100 ma  
4/6.3 V 8 amps, 5 V  
6 A, 5 V 2 amps  
5x5x6, 20 lbs sh.  
Paeo #910-96R \$12.

STANCOR P8151: 115 V 60 Hz  
sec 2300 V 5 ma, 2/2.5 V  
2 A. 3x4x4x3x2, 8 lbs \$7.95

ISOLATION

DUAL PRIMARY, each 100/  
110/120 VAC 60 Hz; can be  
wired for 200/220/240 V  
input. Secondary 120 V  
1.1 amp tapped 100 V 1 A;  
8 V 2 A -0-8 V 1 A; and  
16 V 1.5 A -0-16 V 1 A.  
Mounted on board WAC soc  
ket, fused secondaries,  
diagram. Xformer 5x4x4x4,  
20 lbs sh. #97313, NEW:  
\$12.95 each; 2/\$22.00

2250 VCT (1750 V  
working)  
from  
115/230 VAC  
60 Hz primary  
6x4x4x4, 32  
lbs. #TF1UX02Y used \$35

2000 VCT 500 MA (1500 V  
working)  
700 ma  
intermittent); 115 VAC 60 Hz primary  
7x5x5x5, 32 lbs sh. #HW201P used, \$30

4600 VCT 475 MA (1500 V  
working)  
700 ma  
or 5670  
VCT 221  
ma 7500  
WV; 115/230 VAC 60 Hz primary. 9x2  
10x2x2, 110 lbs. #229621/610, \$65.00



CONSTANT VOLTAGE  
TRANSFORMERS: 95  
TO 130 VAC 60 Hz  
PRIMARY; WITH  
CAPACITORS. SOLA  
AND OTHER MFGS.  
REMOVED FROM E-  
QUIPMENT.

Sec: 6.3vct 2.38a  
ac 5x3x3x2x2; 8lb  
581-5333 \$5.95

Sec: 24 VDC 5 AMPS  
Size: 4x3x3x5 15LB  
#22661-1 \$9.95

Sec: 25-27VDC 3.5 A  
AMPS; 5x3x4x4 11LB  
#22662 \$6.95

Pri: 2/115 VAC 50-60 Hz.  
Sec: 5 VCT 2 A; 5 VCT 4 A;  
6 VCT 3.5 A;  
115 V RMS 600 MA.  
Size: 4x4x4x3x3; WT: 15 LBS.  
#89-G-2730, USED, \$4.95

## TRANSFORMERS

COMMERCIAL GRADE TRANSFORMERS  
suitable for constructing DC  
regulated power supplies or  
other. All 115 VAC 60 Hz pri-  
maries; end bell style with wire leads. NEW:  
\*\*\*\*\*

#701-145, 36 VCT 4 amps, 5 V 1 amp;  
3x3x3x3, 5 lbs sh wt. \$6.95

#TS-465, 44 VCT 3.5 amp, 30 VCT 1.2 A,  
9 V 1 A; 4x3x3x3, 7 lbs. \$5.75

#701-221, 46 VCT 3.5 amps, 7.5 V 2 A;  
4x3x3x3, 6 lbs sh. \$5.95

#TA-600, 48 VCT 3.75 amps, 48 VCT 1 A;  
4x3x3x3, 8 lbs sh. \$5.85

#701-129, 50 VCT 2 amps, 6 V 2 A;  
3x3x3x3, 5 lbs sh. \$4.95

#701-206, 115/230 VAC primary; secondary  
two 55 VCT 3 A; 4x4x4x3x2, 10 lb

#701-203, 55 VCT 4.5 amps, 7 V 2 A;  
4x4x3x3, 10 lbs sh. \$7.95

#701-205, 2/55 VCT 4 A; 4x4x4x4 10 lb. \$9.95

#701-206, 115/230 VAC primary, secondary two  
55 VCT 3 A; 4x4x4x3x2, 10 lb. \$9.50

Pri 115  
VAC 47-  
63 Hz  
all;  
#115-  
2054,  
115 V 200 ma, 6.3  
V 6.25 A; 2x3x3x3  
5 lbs sh., \$4.95  
#435-2054, 435 V  
370 ma; 2x3x3x3  
8 lbs sh, \$7.95  
#1000-2054, 869/  
930/1000 V 300  
ma; 3x4x4x4, 14  
lbs sh, \$11.95

Pri: 115 V 60 Hz  
Sec: 900 VCT 160  
ma; 4x5x3x3, 8  
lbs. #74618 \$7.95

Pri: 115 V 60 Hz  
Sec: 900 VCT 64  
ma; 5x3x2x4x2, 12  
lbs. #746-7167 \$4

Pri: 115v 50-133cy  
Sec: 20 VOLT LOAD  
OR 12.5V @ 2 AMPS  
MOUNTED ON 4" RD.  
ELECT. BOX COVER  
3x3x2x2; 2 LBS.  
#FR-24960 \$1.25

Pri: 117 v. 60hz  
Sec: 1250V. 2madc  
4.6kVDC TEST  
2.5 V, 2.1 A  
2.5 V, 1.75 A.  
4x3x3x3; 10 lbs  
#3340\*11866 \$7

PLUG-IN TRANSFORM  
Pri: 115v 60Hz  
Sec: 24V 20VA  
2x2x2x2; 2LBS.  
BE#8002 \$1.50

Pri: 115v 50-133cy  
Sec: 20 VOLT LOAD  
OR 12.5V @ 2 AMPS  
MOUNTED ON 4" RD.  
ELECT. BOX COVER  
3x3x2x2; 2 LBS.  
#FR-24960 \$1.25

Pri: 115v 50-133cy  
Sec: 20 VOLT LOAD  
OR 12.5V @ 2 AMPS  
MOUNTED ON 4" RD.  
ELECT. BOX COVER  
3x3x2x2; 2 LBS.  
#FR-24960 \$1.25

Pri: 115v 50-133cy  
Sec: 20 VOLT LOAD  
OR 12.5V @ 2 AMPS  
MOUNTED ON 4" RD.  
ELECT. BOX COVER  
3x3x2x2; 2 LBS.  
#FR-24960 \$1.25

Pri: 115v 50-133cy  
Sec: 20 VOLT LOAD  
OR 12.5V @ 2 AMPS  
MOUNTED ON 4" RD.  
ELECT. BOX COVER  
3x3x2x2; 2 LBS.  
#FR-24960 \$1.25



## CHOKES

10 HY 500 ma 43 ohm 1000 WV  
5 $\frac{1}{2}$ x5x6 24 lbs. SMB202916 \$9.

10 HY 225 ma 78 ohm 500V  
4 $\frac{1}{2}$ x3x5; 12 lb #SC26009 \$6

4 HY 650 ma 25 ohm 1.07 kv  
6 $\frac{1}{2}$ x5x4 $\frac{1}{2}$  20 lb 3E7485547 \$9

10 HY 150 ma 130 ohm 1660WV  
2 $\frac{1}{2}$ x2 $\frac{1}{2}$ x5; 5 lb SMB-202915 \$4.

2 HY 100 ma 100 ohms 2 KV  
test; 2x1 $\frac{1}{2}$ x1 $\frac{1}{2}$  #T56379 \$2.00

6 HY 250 ma 105 ohms 2 KV-T  
4 $\frac{1}{2}$ x3 $\frac{1}{2}$ x3, 8 lbs. L123/610 \$6

7 HY 200 ma 140 ohms; 3x3 $\frac{1}{2}$   
x2 $\frac{1}{2}$ , 5 lbs. Kenyon T152, \$5

4 HY 550 MA 40 ohms \$4.95  
3 $\frac{1}{2}$ x4x4; 7 lb Paeco 911-39

4 HY 250 MA 60 ohms 3000V1  
3x2x2x3 $\frac{1}{2}$ ; 7 lb C-1412 \$3.95

4 HY 400 ma 70  
ohms 450 Vrms;  
3 $\frac{1}{2}$ x3x3, 6 lbs.  
#SMD-422-745 \$4.

4 HY 300 ma 70 ohms 1000 V-  
rms; 3 $\frac{1}{2}$ x3 $\frac{1}{2}$ x3 #SMD422768 \$4.

1 HY 700 ma 11 ohms 1K WV;  
5 $\frac{1}{2}$ x3x3 $\frac{1}{2}$ , 9 lbs. L101/141 \$3

2 HY 700 ma 23 ohms 1K WV;  
5 $\frac{1}{2}$ x3x3 $\frac{1}{2}$ , 9 lbs. L201/141 \$4

10-22 HY 40 ma max 1600 V-  
rms; 2 $\frac{1}{2}$ x1 $\frac{1}{2}$ x1 $\frac{1}{2}$  3C570-7 \$3.00

125 mHY 1 amp 1.8 ohms 500  
Vrms; 3x2 $\frac{1}{2}$  dia 3C315-41 \$4

10 HY. 100MA. 263 ohm. 3 $\frac{1}{2}$ x  
3x2 $\frac{1}{2}$ ; 3lb. #228-1859 \$3.25

12 HY 80 MA 375 ohm \$1.50  
3x2x2; 2 lbs. SK1N20C53

150 MA AVAILABLE VARIOUS  
HY TELL US YOUR NEED.

3 HY 350 MA 30 2K PV; 3 $\frac{1}{2}$ x  
4 $\frac{1}{2}$ x2 $\frac{1}{2}$ , 6 lb. L-225/PP115 \$3

3.5 HY 200 ma 90 V 1 KVRMS  
3 $\frac{1}{2}$ x4 $\frac{1}{2}$ x3, 4 lbs. #7629828 \$3

TUNED REACTOR, 210 mHY 1 A  
choke in circuit with 8 mf  
and 4 mf capacitors; switch  
selects 50 or 60 Hz opera-  
tion. 1.5 ohms max DC res.  
4 $\frac{1}{2}$ x6x4 $\frac{1}{2}$  10 lbs. USG3416 \$8.

PRI: 60 V 60 Hz. SEC: 2130  
V 16 ma, 112 V 4. MA. 4 $\frac{1}{2}$ x6  
x4 $\frac{1}{2}$ , 10 lbs. #HA131P \$8.95

10.000 VOLT

AMP P/N 845321-3  
PRI: 115V 60Hz.  
SEC: 10,000VAC/100MA  
5x5x4; 10Lbs. \$20

SCOPE XFORMERS

ACE HV POWER SUPPLY as on  
page 10; 3000 VDC 50 ua  
output from 115 VAC 60 Hz  
input. Includes 2/1B3 tubes  
6x7x2, 8 lbs sh wt. Unused.  
#ACE-HV3000, \$35.95 2/\$10.

PRI: 112/117/122V. 60 Hz.  
SEC: 228V @ 15 MA.  
360V @ 125 MA. TAPPED  
@7V/332/346  
6.6 v. 4.2 AMP.  
5x3 $\frac{1}{2}$ x3 $\frac{1}{2}$ ; 8Lb. 229613-869 \$5

HV OSCILLATOR TRANSFORMER  
F/HP-160 & USM-105A scopes;  
used with 50 Khz 6A45 os-  
cillator. Two HV windings  
approx 5000 V each. 2x2x2 $\frac{1}{2}$   
x2 $\frac{1}{2}$ , 2 lb. #3862 NEW \$35.

STANCOOR  
CHOKES  
#C-1412,  
4 Hy 250  
ma 60;  
3 KV in-  
sulation. 2 $\frac{1}{2}$ x  
3x3 $\frac{1}{2}$ , 5 lbs.  
Used, \$4.00

#C-2326, 1 Hy  
300 ma 43 ohms  
1500 V insula-  
tion. 2 $\frac{1}{2}$ x3x1 $\frac{1}{2}$ ,  
3 lbs. NEW \$3.

3.5 HY 500 MA  
100 V. 60 CYC  
30 OHMS 715WV  
4x5 $\frac{1}{2}$ x3 $\frac{1}{2}$ ; 10 LBS  
TF1A04KA/A8649  
\$2.95

10 HY 225MA  
85 OHM  
3 $\frac{1}{2}$ x5x5  
WT. 11 LBS.  
#TF1RX04YY  
\$3.95

4.5 HY 150 ma  
65 ohms 2500 V  
test; 2 $\frac{1}{2}$ x3x2 $\frac{1}{2}$   
5 lbs. #221-  
6642 NEW \$2.95

10 HY 45 ma  
810 ohms  
2 $\frac{1}{2}$ x1 $\frac{1}{2}$ x1 $\frac{1}{2}$  2#  
3C325-12 \$2.

15 HY 150 ma  
4x3x4, 8 lbs  
#15H150 \$6.

20 HY 80 ma  
320 ohms 2 KV  
insulation;  
4x3 $\frac{1}{2}$ x3, 6 lbs  
#38054, \$3.95

J-95/CRD-2 POWER CONTROL BOX  
for controlling and monitor-  
ing 115 or 230 VAC power cir-  
cuits upto 500 watts. Con-  
sists of autotransformer  
w/10 step voltage control  
from 96 to 137 VAC and 240  
VAC. Also features 3 $\frac{1}{2}$ " round  
11-reed 55-65 Hz line fre-  
quency meter, 3 $\frac{1}{2}$ " round 0 to  
150 VAC meter, 5 and 10 amp  
circuit breakers, and over-  
load relays. 14 $\frac{1}{2}$ x14x13, 72 lbs sh. Used \$48.

8 HY 116 ma 250 ohm 1500  
Vrms; 3 $\frac{1}{2}$ x3 $\frac{1}{2}$ x2 TFLA04YY \$3.

10 HY 75 ma 268 ohms; 4x2 $\frac{1}{2}$   
x2 $\frac{1}{2}$ ; 3 lbs. #CS13886, \$3.

6 $\frac{1}{2}$ x5 $\frac{1}{2}$ x4 $\frac{1}{2}$ ; 20 LBS.  
SCHOTT TY4RX020A  
\$12.95

PRI: 117V 50/60  
SEC: 6500VCT  
65MADC, 4350WV  
5 $\frac{1}{2}$ x6x7 $\frac{1}{2}$ ; 35LBS  
539-6504 \$25.00

3 PHASE DELTA  
60 hz 400 wv  
nominal 208 v  
3phase  
1940 wv  
1370 v rms 52  
ma rms per leg  
5x5 $\frac{1}{2}$ x4 $\frac{1}{2}$ ; 18 lb  
686-6836 \$25

DUAL CHOKE  
11 HY 100 MA  
200 OHMS  
4x4x5 $\frac{1}{2}$  WT 8  
#3C557F-1  
\$1.75

0 HYS 500 MA  
45 OHM DC RES  
500 WORK VOLTS  
#5950-646-1383  
\$5.95

1.5 HY 1.5 AMP  
5000 V. TEST  
8 $\frac{1}{2}$ x8 $\frac{1}{2}$ x6 $\frac{1}{2}$ ;  
SHPG. WT: 60 L  
#5950-159-6041  
\$14.95

PRI: 115 VAC 60 Hz;  
SEC: 280 VCT 75 MA; 13.5 V  
1.2 AMP; 5 VCT 3 A.  
SIZE: 4 $\frac{1}{2}$ x3 $\frac{1}{2}$ x4-5/8; 16 LBS.  
#193-8767 \$3.95

PRI: 115 VAC 50-60 Hz; Sec  
850 VCT 340 ma 700 WV. 4 $\frac{1}{2}$ x  
5 $\frac{1}{2}$ x4 $\frac{1}{2}$ , 17 lbs. #FT2546 \$10.

PRI: 115 VAC 60 Hz; Sec:  
870 VCT 250 ma 2 KV insula.  
5x4 $\frac{1}{2}$ x4, 12 lbs. #T5/610 \$8.

PRI: 115/230 VAC  
SEC: 650 VCT 70  
ma, 6.3 V 3.8 A.  
3 $\frac{1}{2}$ x4x3 $\frac{1}{2}$ , 7 lbs sh  
#M4626/TS1060 \$6.

PRI: 117V 50-60CYC  
SEC: 3/5V CT @ 2A  
2/5V CT @ 2A  
2/2.5V CT @ 10A  
7x4x3 $\frac{1}{2}$  WT. 12 LB  
GILFILLAN #54148-1  
PRICE: \$5.95

SPEED CONTROL  
CONSISTS OF A  
TRANSFORMER  
IN BOX 115 V.  
60 HZ. WITH  
OUTPUT SELECT  
OR SWITCH

MARKED OFF-HI-MED-LOW.  
PLACED IN SERIES WITH A.C.  
LINE & LOAD SELECTOR ALLOWS  
100%, 40% OR 20% OF INPUT TC  
LOAD, 100 WATTS. SIZE 4 1/2  
X 4 1/2 X 3; 61 LBS.  
#230428 NEW \$2.95

PRI: 115/230 VAC 50-60 Hz  
Sec: 320 VCT 830 ma, 2.5 V  
CT 6 amps. 5x6 $\frac{1}{2}$ x4 $\frac{1}{2}$ , 18 lbs  
sh. #TF1RX03NA, \$12.95

PRI: 115/230 VAC 50-1000 Hz  
Sec: 360 V 600 ma, 230 V 15  
ma; 740 WV to grad. 4x5 $\frac{1}{2}$   
x3 $\frac{1}{2}$  12 lbs. #C185028 \$9.95

DE-ICING TRANS-  
FORMER with 0-100  
AC ammeter, 1 KW:  
Pri: 115 VAC 60 Hz  
Sec: 10/14/19/24 V  
On-Off switch,  
fused line; 140 lb  
16x8x15 $\frac{1}{2}$ , disassem-  
bled. #5950-537-  
4950, used, \$39.50

TRIPLE  
CHOKE  
Each wind-  
ing 10 mH  
1 amp or  
5 mH 2 amp;  
 $\frac{1}{2}$  ohm res, 60 WV  
to grad. 2 $\frac{1}{2}$ x4 $\frac{1}{2}$ x2 $\frac{1}{2}$   
4 lb. #3069 \$3.95

DUAL CHOKE, 0.05H  
500 ma 1.36 ohm;  
3 $\frac{1}{2}$ x4x2 $\frac{1}{2}$ , 4 lbs sh.  
#3C57527-5 \$3.00

PRI: 120 V  
60 CYCLE  
SEC:  
5.4V/2.7V  
@15A  
5VCT  
@15A  
WITH  
INSU-  
LATOR  
& TUBE SOCKET C6  
5x5x7 $\frac{1}{2}$  15 LBS  
5950-553-5572  
\$14.95

DUAL CHOKE, 30 Hy 25 ma  
1350 & 5 Hy 135 ma 150;  
2 $\frac{1}{2}$ x5x2 $\frac{1}{2}$ , 3 lb. #6663, \$3.

PRIMARIES 0-120,130,140 60  
CYCLES. VARIOUS MANUFACTURE  
USED, CHECKED, GUARANTEED.

1 AMP \$4.95 9 AMP \$32.  
1.25 5.50  
1.75 6.50 45 AMP \$90.

0-240 VAC VARIABLE TRANS-  
FORMERS, 220/240 primaries  
8 AMP \$42. 12 AMP \$55.  
9 AMP \$45. 15 AMP \$65.  
KNOBS & DIAL PLATES INCLD.  
Other values avail. Write.

12 VOLT 60 HZ input, 0-3.5  
V 2 amps out. #5-1066, \$3.

VARIAC M-5/RMS11-2, 0-135V  
@ 5 AMPS FROM 114 VAC 400  
HZ INPUT, #7486, \$12.95

VARIAC M20BB 120 VOLT 350  
20 AMP. MOTORIZED 115V400  
#5950-089-7734 NEW \$65.00

115VAC 60HZ 9AMP GANGED  
FOR TWO PHASE MOTORIZED  
115VAC 60HZ CN-54/FST-1  
USED, \$50. LESS MOTOR \$45.

POWERSTAT, 115v. 400/800HZ  
OUTPUT: 0-130V  
7.5 AMPS,  
0.975 KVA.  
#5950-518-  
2508, NEW  
\$13.95

DIAL PLATES, UNUSED.  
4" DIA. 0-100 SCALE; 7/8"  
DIA. CTR. HOLE, TAKES 3  
SCREWS. #BP8087, \$1.00 EA

10" DIA. 0-100 SCALE; 1 $\frac{1}{2}$ "  
DIA. CTR. HOLE, TAKES 4  
SCREWS. #BP653, \$2.50 EA

TF-238 400 Hz  
LINE REGULA-  
TOR, input  
100-130 VAC  
400 Hz; output  
115 VAC -5 V  
400 Hz 7.5 KV. Uses 13 amp  
variable transformer and  
buck-boost transformer;  
p/o TPS-1G system. 10 $\frac{1}{2}$ x14 $\frac{1}{2}$   
x9 $\frac{1}{2}$ ; 55 lbs sh. Unused \$75.

CN-514/GRC AUTO-  
MATIC VOLTAGE  
REGULATOR, regu-  
lates inputs of  
95 to 135 VAC  
47.5 to 63.5 Hz  
to output of 115  
VAC -1% over a

current range of 0 to 43 amps. Uses motor  
driven variable autotransformer with drive  
circuit and buck-boost transformer for regu-  
lation. Has standard duplex outlet unregu-  
lated output, duplex outlet regulated, and  
seven Amphenol-type connector outlets. Also  
2 $\frac{1}{2}$ " rd 0-150 VAC meter and circuit breaker.  
operates in manual or automatic modes. 8 $\frac{1}{2}$ x17  
x15; sh wt two pkgs 70/20 lbs. Used, \$125.00



MF-57 MAST BASE with coil spring and brown insulator. Use MS-53 or -54 as beginning mast section. Mounts in 2 1/2" dia hole as on brackets MF-41-50-60, AB-243. 1 1/2"Hx4 1/2" dia, 11 lbs sh. Unused \$10.

Unused, \$15.00

AT-803/VR Center-Fed Broad-band Vertical Dipole, 225-400 Mhz; N conn. 9 1/2x2 1/2; used \$15.

MAST SECTIONS (shown to left) 3 ft. painted, copper-coated tubular steel. Sections screw together to make desired length.

with MS-49 as top--then MS-50, -51, -52, and -53. MS-53 can be screwed into another MS-53 for added length. (MS-53 also screws into MS-54. Sections self-support to 15 feet. Taper 5/8" to 3/16"; 1 lbs sh. May need paint. MS-49-50-51-52-53, used \$1 ea. Unused \$1.50 ea. MS-54 used \$2.50; Um \$4.

BG-56 CANVAS ROLL BAG f/MS-sections, \$6.

-----

CW-206 ROLL BAG for MS-116-117-118 mast sections; 40"Lx3"Hx5"W, \$6.00 each.

Page 15



# CABLES

## NEW COAXIAL CABLE

NEW MANUFACTURE AND BRANDED WITH STANDARD TYPE NUMBERS TO MIL-R-17A SPECIFICATIONS.

PRICES LISTED FOR LENGTHS INDICATED, IN-BETWEEN LENGTHS USE THE HIGHER PRICE. LESS THAN 100 FEET ADD 10% TO HIGHEST PRICE

COAX		100	500	1000	5000
RG-#	Ohms	feet	feet	feet	feet
RG-8/U	52	.22	.21	.20	.20
RG-11/U	75	.20	.19	.18	.18
RG-58/U	53.5	.11	.10	.09	.09
RG-59/U	73	.12	.11	.10	.10

Prices subject to change without notice.

## NEW COAXIAL CONNECTORS



SO-239	PL-259	CH-259	PL-258 JUNCTION
59¢ ea.	69¢	75¢ ea.	\$1.25 ea.
10 or more 10 or more	65¢ ea.	70¢ ea.	10 or more
55¢ ea.			\$1.10 ea.
#SH-SO-239, one hole mt	#83-58FCP, short barrel PL-259 for RG-58, 50¢	UG-536 "N" conn. for SO-239 60¢	UG-58, \$1.

## COAX CONNECTORS

CONNECTORS & ADAPTERS: (m) male, (f) female, (bulk) bulkhead, (rec) receptacle, (r/a) right angle; (U) used, (Un) unused.

TYPE HNC: UG-68 m (RG-58) U-45¢ ea, 10/4.	UG-909 bulk U-31
UG-306 90 m-f Un-32.	-911 bulk Un-32
-260 m (RG-59) U-65¢	-913 m r/a Un-32
-273 to UHF Un-32.	-1090 to post U-32
-282 to post \$1.50	-912 bulk Un-32
-290 f rec U-65¢	-1441 to two banana jacks U-33.
-291 f panel U-31.	

TYPE C: UG-573 m (RG-8) U-1.50 each.	UG-710 m r/a Un-33
UG-626 m (RG-21) U-32	-943 (RG-12) U-33

TYPE N:	UG-18 (RG-21) Un-32.	UG-536 (RG-58) Un-31
-27 m-f r/a Un-32.	-58 f chas U \$1.50	-997 r/a rec Un-34
-30 f-f bulk Un-32.		

OTHERS:	UG-100 m U-\$1.50	DA-113 dummy U-35
-100 panel U-\$1.50		
-109 f/UG-100 \$1.50	-212 HN r/a Un-33	
M-359 elbow: PL-259 to SO-239, U-40¢ Un-75¢		
UG-175: reduces PL-259 for RG-58, NEW 35¢		
-176: " " " RG-59, NEW 35¢		

COAX CABLES from mil-equipment; used-usable: RG-9 w/two UG-573 "C" connectors, 13" \$2.50 UG-58 w/two UG-68 HNC conn., 4' min., \$3.00 RG-59 w/male & female "N", 50', #CG-357, \$3. RG-213 w/two right angle male "N", 3', \$6. BATTERY CABLE, 2-cond #8, 8 ft, \$3.00

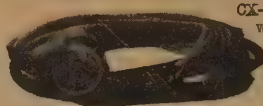
# WIRE SALE

VINYL-COVERED HOOK-UP WIRE, various colors; all stranded copper. On orders above 2000' we may not be able to ship continuous length.

#12 wire	\$7.50/100 ft	\$50/1000'
#14	\$6.50/100'	\$42/1000' \$185/5000'
#16	\$4/100'	\$20/1000' \$65/5000'
#18	\$3/100'	\$14/1000' \$50/5000'
#20	\$3/100'	\$12/1000' \$45/5000'
#22 shielded	\$3.50/100'	\$22/1K' \$75/5K'
#26 solid	\$6/500'	\$9/1000' \$30/5000'

AIRCRAFT-TYPE WIRE, nylon insulation w/braid covering; silver-coated wire and shield: #22 stranded, \$4.50/100' \$32/1000'

COMPUTER CONTROL CABLE in black PVC jacket, #24 wire in color-coded vinyl; LV-low voltage	Cond	10'	100'	500'	1000'
#CC24-28LV 28	\$/ft	.45	.32	.28	.22
CC24-14 14		.32	.28	.24	.18



U-226 contacts gold-plated; can be rewired for 12 AWG. U226 mates to U226. 4 lbs. 2/\$7.

## AMPHENOL

# Sale!

RF and AUDIO CONNECT-ORS, all new package; Male (M), Female (F) HNC quick assembly: #31-4700 50 (M) \$1. -4701 50 (F) \$1. #31-4702 70 (M) \$1.25; -4703 70 (F) \$1.25

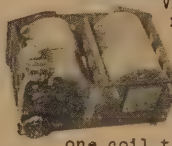
UHF-types: #82-23 (M) to (F) w/ground, \$1.50 #83-55PA, press male to (F) adapter, \$1.25 #83-58FCP, short barrel PL-259 f/RG-58, \$1.50

83-877, adapter with PL-259 each end, \$1.25 83-878, single hole mount SO-239, \$1.60 M-358, adapter "T" 2-(F) to (M), \$1.75 #81-103 mini plug or #81-104 mini jack, \$1.50

MICROPHONE CONNECTORS, all males 1/8" diameter

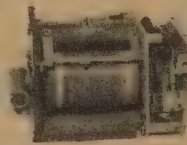
#80-23 press fit 60¢ #80-876 lock ring \$1 #80-872 extended pins 60¢ #80-878 lock ring \$1 #80-886 threaded barrel \$1

## RIBBON INDUCTOR



one coil to the other as a 28 VDC motor turns both. O/a 9 1/2 x 5 1/2 x 6 1/2, 10 lbs sh wt. #1401/CU-991, removed from equipment, \$29.95

618S-1 POWER AMPLIFIER, p/o Collins 2-25 Mhz 100 watt transmitter. Has 12.3 uH roller inductor; coil 3 1/2 x 1 1/2" dia with 27 turns #14 silver-tinned wire rotated by 115 VAC 400 Hz selsyn. Also ten Centralab 850 HV capacitors 10 pf, 50 pf, 7/100 pf, and 1000 pf. Big silver contacts on ceramic switch; uses three 6159 tubes. 11x5x6, 10 lbs #3496/618S-1, less tubes, \$22. With tubes \$3C MATING CONNECTORS, 2 required, \$2.50 each. SCHEMATIC for 618S-1 power amp, \$1.50

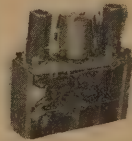


an antenna to a transceiver's frequency. O/a 4 1/2 x 2 1/2 x 3 1/2, 5 lbs. sh. #T301/CU-991, \$14.95

## COLLINS 250 KHZ I.F.

250 KHz IF ASSEMBLY from Collins 618S-1 transceiver. Has 250 KHz mechanical filter with 6.7 KHz width and tubes 3/5749 and 2/5726. 4 1/2 x 6 x 3 1/2, 3 lbs sh wt. #IF250-67/618S1, used, \$12.95

250 KHz IF ASSEMBLY from RT-311/ARC-38 transceiver. Similar to above but with two mechanical filters--one 2 KHz width, the other 8.5 KHz. #IF250/ARC38 \$24.95



250 KHz CRYSTAL OSCILLATOR from Collins 618S1. Has 250 KHz BFO oscillator coil, crystal oven with CR-46 250 KHz crystal, and 2/5749 tubes. 4 1/2 x 6 x 1 1/2, 2 lbs sh. #CGC-250/618S1, \$6.95

## TRANSMITTING CAPACITORS

MICA TRANSMITTING CAPACITORS, G-SERIES TYPE IN USED OR UNUSED CONDITION DEPENDING UPON A VALUE'S AVAILABILITY. VARIOUS MANUFACTURERS. SATISFACTION GUARANTEED OR PURCHASE PRICE WILL BE REFUNDED. OTHER VALUES IN STOCK. WRITE.

TYPE	KV	MFD	KV	MFD
G1, 2 1/2" h x 2 1/2" dia., wt: 3 lbs.	1.0	0.04	6.0	\$12.50 ea
	1.5	0.08	6.0	0.0001
	3.0	0.02	6.0	0.0002
	4.0	0.0062	10.0	0.00024
G2, 3 1/2" h x 3" dia., wt: 5 lbs.	2.0	0.03	10.0	0.00015
	2.0	0.045	10.0	0.00057
G3, 5" h x 4" dia., wt: 8 lbs.,	2.5	0.15	6.0	\$27.50 ea
	5.0	0.02	20.0	0.006
G4, 5" h x 5 1/2" dia., wt: 12 lbs.	4.0	0.084	6.0	0.00015
	6.0	0.0224	10.0	\$39.50 ea
G5, 10" h x 6 1/2" dia., wt: 22 lbs.	10.0	0.02	15.0	0.0373
	15.0	0.0068	35.0	0.02
				\$59.50 ea
				0.0082
				0.0002

## ROBOTICS MOTORS

15° STEPPER MOTOR, removed from computer printer; originally used +9 to +40 VDC pulse. Hi-speed, hi-performance; w/original driver circuit diagram. 1 1/2" dia shaft; o/a 5 1/2 x 5/8 dia, 2 lbs BINDER #4-62 4 field \$17.50; #2-62, 2N, \$17.

15°4-PHASE VR STEP SERVO, 5 ohms 1.5 A/0; 28 VDC input pulse. 2 1/2" dia shaft; o/a 3 x 3 1/2 x 3, 2 lbs sh. Made in Canada; removed from equipment. #20M34C1, \$9.95

26 VDC REVERSIBLE MOTOR with clutch for fast stops; 12K RPM @ 26 VDC 1.2 amps. Clutch engages at 10 VDC which allows variable speed over 10-26 VDC. Rated for intermittent duty. Spline 3/16" dia shaft; o/a 4 1/2" dia, 1 lb. #SR-215 NEW \$6.95

GE DC COMPOUND MOTOR 1/8 HP 115 VDC 1.5 A 1725 RPM; has air pressure brake. P/o tape drive; 5x12x5, 18 lbs sh. #5EC-12RA49, used, \$14.95

30 RPM MOTOR GEARBOX, 115 V 60 Hz with fast stop solenoid clutch; 3x3/8" dia shaft. 3 1/2 x 10 x 3 1/2, 10 lbs. #2732U-600, \$9.95

GE #5BC48AB550A 1/2 HP DC SHUNT COMPOUND MOTOR, armature 115 VDC 2.1 A; field 40 VDC 1.2 amp. 1140 RPM. Double end shaft 2x5/8 and 4x5/8" dia. Casing 11 1/2 x 6 1/2" dia. 60 lbs sh. Used \$22

160 RPM DRIVE UNIT w/clutch has Globe G-25A512 27 VDC 15000 RPM motor and 27 VDC clutch assembly. Motor operates with good torque over 5 to 27 VDC. 160 RPM output on 3/16" dia X 1/2" lg shaft. O/a 3 1/2 x 4 1/2 x 3 1/2, 3 lbs. #160DRV/618 used \$8.95


100 RPM 12 VDC GEAR MOTOR, output at 3/8" x 1/8" bar which would mate with slotted shaft (not included). Also 3400 RPM available on 5/32" dia x 1/2" lg shaft. O/a 5 1/2 x 2 1/2 x 2-3/8; 3 lbs sh. #LEE-11152S unused, \$8.95


115 VOLT AC-DC MOTOR, starts at 15 VDC; runs counter clockwise. 3" dia X 5 1/2" lg plus 5/16" dia X 1-1/8" lg threaded shaft. 5 lbs sh. #AC-DC-R102, unused, \$4.95

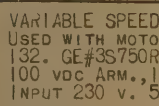
115 V AC-DC MOTOR, starts at 25 VDC, runs clockwise. 2 1/2 x 3 x 4 1/2 plus 5/16" dia X 1 1/2" long machined spiral shaft. 3 lbs. #AC-DC-H102, \$3.

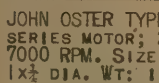
27 VDC 10 AMP 250 RPM MOTOR with brake which actuates when DC input is approx. 5 volts. Duty cycle 30 sec on, 300 sec off. O/a 2 1/2 x 2 1/2 x 6 1/2 plus 7/8" long X 3/8" dia. shaft. 5 lbs sh. #2312-6, \$7.95

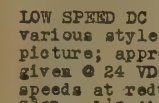


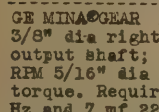
 HAND-CRANK MAGNETO GENERATORS  
OUTPUT APPROX. 100 VOLTS DEP-  
ENDING ON SPEED OF ROTATION.  
USED TO RING BELLS IN TELEPH-  
ONE LINES. CAN BE USED FOR  
worm shocker and other experiments; 4x2 1/2, 2  
lbs sh. 0-42 w/orank, used-checked, \$12.00  
GN-38B w/exposed gear crank, p/o EE-8, \$16.

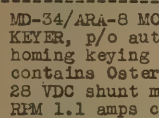
 DC AIRCRAFT MOTOR; GE#5BA-  
50LJ29, 0.4 HP, 3000 RPM.  
ARMATURE: 60V. @ 2.3 AMPS  
FIELD: 27 VOLTS @ 6.5 AMPS  
DUTY: 10 MIN. @ FULL RA-  
TING. SHAFT IS CORKSCREW-  
TYPE 5/8 INCH DIA. FLANGE MTG. 3/8 CNTS.  
BODY SIZE: 6x4x4 1/2 WT: 1 LBS. \$4.95


 VARIABLE SPEED DRIVE CONTROL  
USED WITH MOTOR AM No. E-85-  
132. GE#35750RJ750A1, FIELD  
100 VDC ARM., 140 VDC., 2.6 A  
INPUT 230 V. 50/60 HZ. 5 LBS  
Unused w/schematic \$15.00


 JOHN OSTER TYPE C-24A-1B KS-5829  
SERIES MOTOR; 27 VDC, 0.01 HP,  
7000 RPM. SIZE: 3x2 DIA.; SHAFT:  
1x1/2 DIA. WT: 1 LB. Unused, \$2.95

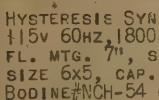
 LOW SPEED DC GEAR MOTORS,  
various styles similar to  
picture; approx speeds  
given @ 24 VDC. Slower  
speeds at reduced voltages to 7 VDC minimum.  
3 1/2" L x 1 1/2" dia. Used-some corrosion-tested OK  
#30 RPM-DC-QM \$8.50 #70-100 RPM-QM, \$8.75  
#200-300 RPM-DC-QM, \$8.50

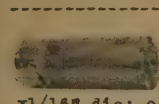
 GE MINIGEAR MOTOR, 328 RPM  
3/8" dia right angle  
output shaft; other 3500  
RPM 5/16" dia shaft, 5 in-lb  
torque. Requires 115 VAC 60  
Hz and 7 mf 220 VAC capacitor; o/a 4x10x3,  
8 lbs sh. GE #5KCM49NG, used, \$8.95  
CAPACITOR for above, 7 mf 330 VAC, \$1.35

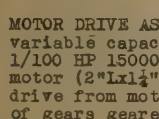
 MD-34/ARA-8 MODULATOR-  
KEYER, p/o automatic  
homing keying assembly;  
contains Oster BT-2-15  
28 VDC shunt motor, 12000  
RPM 1.1 amps connected to double worm reduc-  
tion with output of 32 to 50 RPM over 10-25  
VDC. Also has phase shift capacitor and RF  
UHF connectors. 3 1/2x10x4 1/2, 5 lbs. Used, \$3.95


 28 VDC 12000 RPM MOTOR I/ARC-3  
set. Removable worm gear;  
shaft 1"x3/16" dia. O/A 3"  
x 1 1/2" dia. #697-2644, \$5.95

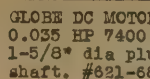
 HAND CRANK GENERATOR AS USED IN  
GIESON GIRL RESCUE TRANSMITTERS  
OUTPUT 28 VDC @ 175 MA & 300 VD  
@ 30 MA. WHEN CRANKED AT 60 RPM  
GEAR RATIO APPROX. 72 TO 1.  
NO LEGS SEAT OR MOUNTING.  
#GEN/CRT-3 RE-MOVED \$12.00


 HYSTERESIS SYNCHRONOUS MOTOR  
115V 60HZ, 1800RPM, CONT. 1/8HP  
FL. MTG. 7", SHAFT 2 1/2" DIA.  
SIZE 6X5, CAP. ST. USED 25LB.  
BODINE#NCH-54 OR EQUAL \$95 \$16


 DC MOTOR, operates over 10-  
15 VDC 100 ma 2375-2425 RPM  
with governor. Shaft 5/16" L  
x 1/16" dia; o/a 2-7/8x1-1/8. #AST-GK26 \$7.95

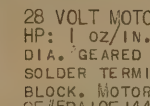
 MOTOR DRIVE ASSEMBLY f/vacuum  
variable capacitor. Uses  
1/100 HP 15000 RPM 28 VDC  
motor (2"x1 1/4" dia.) Has worm  
drive from motor to a series  
of gears geared to a 2" lever arm with 1/2"  
vertical motion. Also has limit switches and  
Cinch DA-15 15-pin connector. O/A size: 8x  
3 1/2x2 1/2, 3 lbs sh. #DRV501/CU991, used, \$9.95


 VE KS-5871-LOI MOTOR, 28.8  
VDC @ 3.3 A. 5600 RPM,  
0.04 HP SERIES WOUND. CONTI-  
NUOUS DUTY; REVERSIBLE  
WITH SPEED GOVERNOR. (MAY  
ALSO OPERATE AT 12 VDC AT  
REDUCED SPEED. SHAFT 3/8", OVERALL SIZE:  
6 1/2x3 1/2 DIA. SHPG. WT: 7 LBS. USED \$7.95

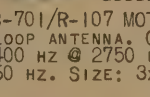
 GLOBE DC MOTOR, 27.5 VDC 2.4 A  
0.035 HP 7400 RPM; 2 1/2" L x  
1-5/8" dia plus 1"x3/16" dia  
shaft. #621-6822 unused \$7.95


 #A7155 DELCO DC MOTOR, 28  
VDC 2.4 A 1/30 HP 3600 RPM.  
Size: 5 1/2x2 1/2" dia; shaft 1"  
x 1/2" dia, 2 lbs. Unused \$4.

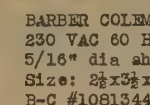
 PD-5/ARA-19 TUNING DRIVE, p/o  
ARN-6 remote tuning system.  
Uses 27 VDC 250 RPM Delco FM  
motor. Also 10-turn 1000 ohm  
linear pot driven by gear from  
the motor. Output with female  
MC-124 spline shaft. Motor shaft 3/8" long x  
1/8" dia. O/A 5 1/2x2 1/2, 4 lbs sh. Used, \$9.95  
Mating conn. \$2.50; MC-124 spline, 20", \$1.50

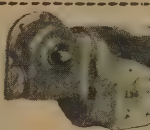
 28 VOLT MOTOR, 135 RPM;  
HP: 1 OZ/IN. WITH 5/16x1/2"  
DIA. GEARED SHAFT; HAS 4  
SOLDER TERMINALS ON 1x1 1/2x5  
BLOCK. MOTOR SIZE: 5x1 1/2x7/8 DIA. WT: 1 LB.  
GE#5BA10FJ444 Used, \$7.95

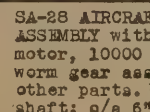
 HEAVY-DUTY TAPE RECORDER MOTOR,  
115 VAC 60 Hz 1500 RPM; 3 1/2x3 1/2x2 1/2  
overall, shaft 1 1/2x5/16"  
dia. 5 lbs sh wt.  
#D6-20220, used, \$5.95

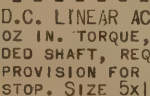
 B-701/R-107 MOTOR FROM AS-313/ARN-6  
LOOP ANTENNA. OPERATES FROM 26 VOLT  
400 HZ @ 2750 RPM. WILL OPERATE FROM 12  
60 HZ. SIZE: 3x2 1/2x3 WITH 3/8" GEAR. WT: 2 LB.  
Price: Used, \$1.95

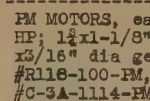
 HOLTZER-CABOT #1981-HC 120 VAC  
400 Hz GEAR MOTOR, 6 RPM with  
40 oz.-in. torque. Shaft 1/2" long  
x 0.2" dia. Overall size: 2 1/2x2 1/2x3,  
3 lbs sh. #1981-HC, unused \$14.95


 BARBER COLEMAN AC GEAR MOTOR,  
230 VAC 60 Hz; approx 3 1/2 RPM.  
5/16" dia shaft X 7/8" long;  
Size: 2 1/2x3 1/2x3, 2 lbs sh.  
B-C #108134483 NEW, \$3.95


 MOTOR W/RIGHT ANGLE SHAFT &  
MOUNT, 1/8 HP 230 RPM.  
SHAFT SIZE: 5/16" LONG X  
3/8" DIA. CLEARANCE BETWEEN  
SHAFT AND MOUNTING ABOUT 1"  
REQUIRES 115 VAC 60 Hz @  
1.9 AMPS. SIZE: 7x3 1/2 DIA.  
WT: 15 LBS. ROBBINS & MEYERS #KL-H330, \$12.95


 SA-28 AIRCRAFT INSTRUMENT  
ASSEMBLY with 27 VDC FM  
motor, 10000 RPM with  
worm gear assembly and  
other parts. Motor size 1 1/2x1 1/2, 3/16" dia  
shaft; o/a 6"x1 3/4" dia, 2 lbs. Unused \$8.95


 D.C. LINEAR ACTUATOR; 26 VDC 2A. 400 RPM. 45  
OZ IN. TORQUE, APPROX. 2" ARM TRAVEL ON TREA-  
DED SHAFT, REQUIRES LIMIT SWITCHES, HAS NO  
PROVISION FOR OVER TRAVEL. HAS BRAKE FOR FAST  
STOP. SIZE 5x1 1/2 IN. GE#5BA10FJ450 USED \$8.95

 FM MOTORS, each 27 VDC 1/100  
HP; 1 1/2x1-1/8" dia plus 1"  
x3/16" dia geared shaft. Used,  
#R118-100-FM, 15000 RPM, \$7.  
#C-3A-1114-FM, 9000 RPM, \$5.95

 RECORDER MOTOR, 1500 RPM; 2" SHAFT  
IS 3/16" DIA. FOR 1 1/2"; 3/64" DIA.  
LAST 1/2". 3/8x3/16" DIA. SHAFT ON  
OTHER SIDE. MOTOR SIZE: 2 1/2x2 1/2x2  
WT: 2 LBS. #602-1 UNUSED, \$3.50

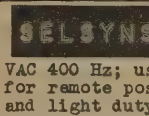
 200 RPM 32 V 60 Hz GEAR MOTOR, has  
shaft 1"x1/2" dia and 3/16" dia shaft  
for fan. For intermittent use, in-  
creased voltage increases  
torque. O/a 5 1/2x5 1/2, 3 lbs.  
#MOL-2460, unused, \$3.25  
120 RPM 115 V 60 Hz GEAR  
MOTOR, 1/2" shaft w/plastic  
gear. 4x3x2 1/2, 3 lb. #ZGM30108, \$3.50

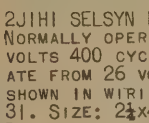
 VICKERS AR-10007G 115 VOLT 50/60 CYCLE  
SOLENOID OPERATED AIR VALVE  
ONE INLET ACTUATES TUBE  
PLUNGER 1" STROKE. USED  
SIZE: 6x4 1/2x2 1/2; 5 LBS. \$12.95

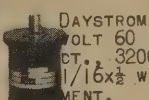
 CONTROL TRANSMITTER SELSYNS, similar to AY201  
rotor 26 V 1 1/2, stator 11.8 V 3 1/2 400 Hz,  
usable in wind direction and antenna position  
projects. Various mfg; 1 lb. #WD-CX-SEL \$6.

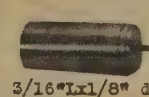
AY-165 AUTOSYN DIFFERENTIAL, 400 CYCLE; 11.8  
V. 3 PHASE ONE TO ONE RATIO. BENDIX & OTHERS.  
Size: 1 1/2x1 1/2. PRICE: REMOVED FROM EQUIP. \$2.95


AY-231 and AY-232 SAME SPECS. AS ABOVE.  
15CX4 TRANSMIT 115 VAC 400 Hz, used, \$4.95  
15RS4L RESOLVER 26/11.8 V 400 Hz, used \$4.95  
23CX4 TRANSMIT 115 VAC 400 Hz, used, \$8.95  
23CX6 TRANSMIT 115/90 V 400 Hz, used, \$10.00  
23CT4 CONTROL TRANS 115 V 400 Hz, used, \$8.95  
23CT6 TRANSFORMER 90/1 V per degree 60 Hz \$10

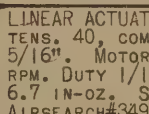
 SELSYNS  
CONTROL TRANS-  
FORMER, 57.5  
VAC 400 Hz; usable in pairs  
for remote position indication  
and light duty turning applica-  
tions. Operable from 24 V 60 Hz with good  
resolution and torque. 1/2" long shaft tapered  
1/2", then threaded 1/2". O/a 4 1/2x2 1/2 dia; 2 lbs.  
#2J1G1, less connector cap \$7.50; w/cap \$9.50  
MK II SIZE 6 SELSYNS, 115 VAC 60 Hz; sold in  
mated pairs for rotational and position-indi-  
cation uses. 7 1/2x4 1/2 dia, 12 lbs/pair.  
Used-checked, various manufacturers, \$45/pair  
SIZE 5 SYNCHRO DIFFERENTIAL RECEIVER, 115 VAC  
60 Hz; used to show the sum or difference of  
two angular motions. 5 1/2x3 1/2 dia, 5 lbs. \$10.  
OTHER SELSYNS AVAILABLE. WRITE YOUR NEEDS.

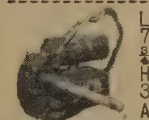
 2J1H1 SELSYN DIFFERENTIAL GENERATOR  
NORMALLY OPERATES FROM 57.5/57.5  
VOLTS 400 CYCLE BUT WILL OPER-  
ATE FROM 26 VOLT 60 CYCLE AS  
SHOWN IN WIRING DIAGRAM ON PAGE  
31. Size: 2 1/2x4 1/2; WT: 8oz.  
PRICE WITH CONNECTOR CAPS.....\$3.95

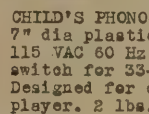
 DAYSTROM TRANScoil CONTROL MOTOR 115  
VOLT 60 CYCLE, 1 PHASE, 2 PHASE 200 VOLT  
CT. 3200 RPM. SIZE: 2 1/2x2, SHAFT SIZE:  
1/16x1/2 WITH GEAR. REMOVED FROM NEW EQUIP  
MENT. PRICE: \$5.00


 TACHOMETER GENERATOR, motor  
28 V 400 Hz 2 1/2; generator 18V  
400 Hz 0.3 V/1000 RPM. No load  
speed 10000 RPM. 2-1/8"x1 1/2" dia  
3/16"x1 1/8" dia shaft. #TACH-SEL-MOD, \$7.95

 ROBOT GEAR BOX  
ROBOT GEAR BOX with two  
electrically independent 3  
VDC motors which are loose-  
ly magnetic coupled. One  
gear has holes with 2  
diodes used as optocouplers  
to sense rotational speed.  
Has two 3/8" dia splined shafts (48 RPM @ 3  
VDC). This plastic gear box could be used for  
light-duty robot, cart, or animation projects  
O/a 7 1/2x4 1/2x2 1/2, 2 lbs. #WD-4955-18, \$3.50 4/\$11

 LINEAR ACTUATOR, STAT. 200,  
TENS. 40, COMP. 40. ARM TRAVEL  
5/16". MOTOR 115V. 400 Hz, 1600  
RPM. DUTY 1/10, 0.04 HP. TORQUE:  
6.7 IN-OZ. SIZE: 5x5x3 1/2 WT: 5 LB.  
AIRSEARCH#34930 USED \$3.95

 LINEAR ACTUATOR, STAT. 200, TENS  
75-100, COMP. 75-100. ARM TRAVEL  
3/8". MOTOR 115V. 400 Hz., 0.025  
HP 6500 RPM. DUTY 1/10, TORQUE:  
3.9 IN-OZ. SIZE: 5x8 1/2x4 1/2 WT: 5LB  
AIRSEARCH#3D146-120 USED \$3.95

 CHILD'S PHONOGRAPH TURNTABLE,  
7" dia plastic platter with  
115 VAC 60 Hz motor; selector  
switch for 33-1/3 or 45 RPM.  
Designed for child's record  
player. 2 lbs. BSR #AL43AC37, NEW, \$3.95 \$3.

 SMALL RECORDER FM MOTOR, operates  
4 to 12 VDC, reversible. 1/8x3/32"  
dia shaft; O/A 1 1/2x1 1/2 dia, 1 lb.  
#R-357141, NEW \$2.; w/pulley \$2.25



## PRR-9 RECEIVER

AN/PRR-9 FM HELMET RECEIVER, extremely lightweight single channel radio in the 47-57 MHz FM range; 5 mw nominal power output. Uses CR-81 type crystal (not available); 455 KHz IF. Requires 5 V 25 ma originally supplied by BA-505 battery (not available).

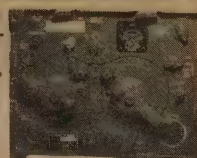
With AS-1998 antenna and H-264 headset. 7x3 1/2 x 2 lbs. Used \$38. Less AS-1998/H-264 \$25. OPERATOR'S MANUAL for PRR-9, \$7.50

ID-1189/PR CHANNEL ALIGNMENT INDICATOR, designed to test AN/PRR-9 and AN/PRT-4 transmitter. Has 47-57 MHz signal generator; checks both sets' batteries. Instructions, probes, and transit case included. 12x11 1/2 x 6, 15 lbs sh. Used, \$45.00

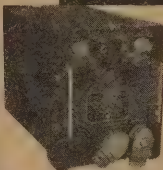


## RECEIVER-TRANSMITTER

RT-66/GRC TRANSCEIVER, 38-54.9 Mhz FM continuously tunable or 100 KHz-step channels or two preset channels. Receives and transmits both voice and 1600 Hz ringing FM; range 10-15 miles. Receiver circuit has variable 1st IF 4.45-5.45 Mhz and fixed 1.4 Mhz 2nd IF; also squelch and 600 ohm audio output. Transmitter uses crystal-controlled oscillator and oscillator power amp; power output 2 watts (LO) or 15 W (HI). Also meter to monitor transmitter filaments and 90 V input. Requires external power supply available separately. With tubes 4/1U4, 2E24, 2/1A5, 2/1L4, 4/1R5, 2/1A24, 1S5, 4/3Q4, 3A4, 5/3A5, 2/3B4, 6AK5. 9x13x11 1/2, 42 lbs. \$55.00  
RT-66/GRC, as above but 20-27.9 Mhz, \$27.50  
RT-67/GRC, " " " 27-38.9 Mhz, \$35.00



## GRC - POWER SUPPLIES



PP-1175A/SR TRANSISTORIZED 115 VAC 60 HZ POWER SUPPLY, provides voltages to operate a RT-66, -67, or -68 plus a R-108, -109, or -110 receiver. Includes power connector, auxiliary receiver connector, & manual. 9x7 1/2 x 14, 40 lbs sh wt. Unused, original-boxed \$85.



PP-112/GRC 24 VDC POWER SUPPLY for RT-66-67-68 transceivers; provides all voltages from 24 VDC 6.5 amp input. 7 1/2 x 9 x 13, 39 lbs sh. Used \$25. Unused, \$35.

PP-109/GRC SUPPLY, as above but 12 VDC 13 A input; used \$34.50

CX-1209 or CX-1210 CABLES f/RT-66-7-8 \$10 ea.

## PRC-10 RECEIVER-TRANSMITTER

RT-176/PRC-10 RADIO RECEIVER-TRANSMITTER; PORTABLE UNIT OPERATING FROM 38 TO 54.9 MHz FM VOICE COMMUNICATIONS. THE RECEIVER SECTION HAS AN IF OF 4.3 MHz AND AN AUDIO OUTPUT IMPED. OF 600 OHMS. TRANSMITTER OUTPUT IS 0.9 WATTS WITH A NORMAL RANGE OF ABOUT FIVE MILES. MICROPHONE INPUT IMPED. 150 OHMS. BOTH RECEIVER AND TRANSMITTER SECTIONS ARE CONTINUOUSLY TUNEABLE. WITH CONTROLS FOR VOLUME, TUNING, SQUELCH, POINTER ADJUST AND DIAL LOCK. CONNECTOR FOR EXTERNAL SPEAKER. WITH TUBES 9/5678, 2/5672, 3/5676, 1A4 AND 5A6. POWER REQUIRED: 135 VDC, 67 VDC AND 1 1/2 VDC. LESS BATTERY CASE. ACCESSORIES LISTED ELSEWHERE. SIZE: 9 1/2 x 3 x 10 1/2. WT: 9 LBS.  
RT-176/PRC-10 USED \$29.50  
RT-174/PRC-8, SAME AS PRC-10 EXCEPT 20.0 TO 27.9 MHz. USED-COMplete, NOT CHECKED, \$30.



RT-175/PRC-9, SAME AS PRC-10, EXCEPT 27.0 TO 38.9 MHz. USED, COMPLETE.

AM-598 AMPLIFIER POWER SUPPLY, functions as 24 VDC supply and audio amp for PRC-8-9-10 transceivers which plug into top. With audio cable and tubes 0C3 2/12AT7, 2/28E6, 28Z5; 11 1/2 x 11 1/2 x 10 1/2, 38 lbs sh. Unused \$36.00



CX-2031 BATTERY CABLE for AM-598, \$8.00 ea.

## ACCESSORIES

CY-744/PRC BATTERY CASE f/PRC-8-9-10, \$6.00  
AT-272A goose-neck antenna base, unused, \$2.  
AT-272 FLAT RIBBON ANTENNA f/PRC-8-9-10, \$3.  
AB-129 RUBBER BASE f/AT-271 (PRC-8-9-10) \$3.  
AB-591 TUBBER BASE f/AT-271 (PRC-8-9-10), \$4.  
AM-598 SHOCKMOUNT \$5. WM-46 CABLE, 10' \$10.  
M-29 MIC w/UG-77, \$5. M-80 MIC w/UG-229 \$10  
HANDSETS, H-33 w/UG-77 \$10. H-189 w/UG229 \$12  
LS-166/L LOUDSPEAKER used \$12 w/set purchase  
GRC/VRC CONNECTORS, specify type and with what equipment used, \$3 each w/set purchase.  
PLUGS, used: UG-77, metal back \$3. UG-229 \$4.  
CX-1211 CONN. ASSY. f/RT66-7-8 to PP112, \$6.  
Connector assy. sold only with set purchase.

## PRC-6 WALKIE-TALKIE



RT-196/PRC-6 FM TRANSCEIVER, single channel crystal-controlled in the 47 to 55.4 Mhz range. Range: approx. 1 mile depending on terrain and conditions. Handheld unit has push-to-talk switch, volume control, ribbon antenna, carrying strap, and provision for H-33/PT handset. Uses type CR-23 crystal (not included or available). With tubes 6/5678, 3B4, 3/5672, 2/5676, and 2G21. Requires 1.5, 45, and 90 VDC. 15x5x4 1/2, 6 lbs sh. Used, \$18.95; MANUAL, \$7.50

CY-852/PRC-6 CASE, space and padding for 42 crystals; 6 1/2 x 6 1/2 x 1, 2 lbs. Used, \$3.00

ID-292/PRC-6 CHANNEL ALIGNMENT INDICATOR, plugs into RT-196 and indicates relative level voltages for B+ filament, osc. injection, limiter, discriminator output, and P-A grid. Also P-A current and calibrate adjust. Unit is basic VTVM with 1 1/2" sq. FS-500 ua-meter and 5678 tube. Power from set under test. ID-292, unused w/manual, \$22.95

## GRC/PRC BATTERY TEST

AN/PSM-13 BATTERY TEST SET; DESIGNED TO CHECK GRC AND PRC-TYPE BATTERY PACKS INCLUDING BA-270, -279, -376, -377, -386/PRC-25, -398/PRC-25, -399, AND -505. METER INDICATES BAD-GOOD (FS 1 MA). WITH ADAPTERS U-240, -241, -242, -297, -314, -315, -346 AND CANVAS CASE. SHPG. WT: 7 LBS. PRICE: USED, EXCELLENT, \$24.95

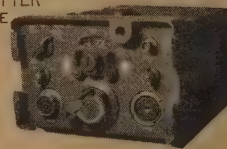


ME-61/GRC FIELD STRENGTH METER 1.4 TO 24 MHz IN THREE RANGES. WITH VARIABLE TUNING, SENSITIVITY CONTROL, 1 1/2" SQUARE METER, PHONE JACK AND ANTENNA. SIZE: 5x5x4 1/2. WT: 5 LBS. UNUSED, \$24.95



RT-70 RECEIVER-TRANSMITTER 47 TO 58.4 MHz FM VOICE COMMUNICATIONS.

FEATURES CONTINUOUS TUNING OR TWO PRE-SET CHANNELS AND PUSH-TO-TALK TRANSMISSION. THE RECEIVER CIRCUIT IS THE DUAL CONVERSION TYPE WITH THE 1ST IF 4.3 MHz AND THE 2ND IF 1.4 MHz. WITH VARIABLE SQUELCH CONTROL. 600 OHM AUDIO OUTPUT IMPEDANCE. THE TRANSMITTER CIRCUIT HAS A 500 MW OUTPUT AND AN AUDIO INPUT IMPED. OF 150 OHMS. POWER REQUIRED: 90 VDC @ 80 MA, 6.3 @ 360 MA AND 6.3 @ 160 MA. WITH TUBES: 6/1U4, 3/1L4, 2/1R5, 1S5, 1A4, 4/3Q4, 3A5, AND 3B4. RELATED ACCESSORY EQUIPMENT LISTED ELSEWHERE. SIZE: 4 1/2 x 13 x 8, 22 lbs sh. Unused, \$32.95



AM-65/GRC AUDIO AMPLIFIER, 3-channel audio amp for RT-70 and also used for interphone in other GRC systems. PP-281-282 or 448 power supply may be placed inside to power RT-70. 4 1/2 x 13 x 8, 17 lbs sh. Used, \$14.95; Unused, \$22.95  
PP-282 SUPPLY, 24 VDC in for AM65/RT70, \$5.

AN/VRC-10 RADIO SET, consists of RT-68, PP-112, MT-299 mount, CX-1211 cable, and manual described separately on this page; 90 lbs sh. Used, \$85.00  
\*\*\*\*\*  
UNUSED AN/VRC-10 in wood crate; contains units listed above plus AB-15 antenna base, MS-117/AB-24 mast section CW-206 antenna bag, UG-530 RF cable, spare fuses, hardware, etc. 182 lbs sh. Unused \$118



TECH MANUALS WITH SCHEMATICS FOR:  
RT-196/PRC-6...\$7.50  
PRC-9A-10A...\$7.50  
RT-66, 67 & 68...\$5.00  
RT-70...\$5.00  
R-108, 109 & 110...\$7.50  
AM-598...\$3.00  
PP-109 & 112...\$5.00  
AM-65...\$5.00  
H-33...\$7.50  
AN/VRC 13-15 or AN/VRC 16-18, CONTAIN INFO & SCHEMATICS ON RT-66, 67, 68, R-108, 109, 110, PP-109, 112, VAR. MTG. CONTROL BOX ES. \$7.50

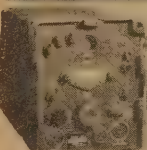
## 2 TO 12 MHz TRANSCEIVERS

RT-77/GRC-9 BACKPACK TRANSCEIVER, covers 2-12 Mhz AM CW in bands 2-3.6, 3.6-6.6, and 6.6-12 Mhz; Hi-LO outputs 7/1 watt (AM), 15/5 W (CW). Receiver section has 456 KHz IF and calibration points every 200 KHz. Transmitter can be continuously tuned or two preset channels; uses 2E22 tube in power amp. Set also includes tubes 2/1L4, 3/1R5, 1S5, 3/3A4, 3Q4; requires 580 vdc 100 ma, 6.6 vdc 2 amp, 120 vdc 45 ma, 1.5 vdc 500 ma, 6.9 vdc 575 ma. RT-77 was used in field and vehicular installations with a number of power supplies designed for it such as GN-58 handcrank generator available below, PE-237 6-12-24 VDC vibrator supply, DY-88 (12 VDC) & DY-105 (24 VDC) dynamotor supplies, PP-327 115 VAC supply. 16x13 x 8, 35 lbs sh. Used, \$39.95; MANUAL, \$8.50



GN-58 HANDCRANK GENERATOR, with legs, seat, two cranks; powers RT-77 at reduced outputs 3.6 W (AM), 10 W (CW). 39 lbs sh. Used \$35.  
CONNECTOR for GRC-9 as available, \$4 w/set.  
HS-30 HEADSET w/CD-604 cord, used, \$7.50  
T-17 MICROPHONE used \$6.95; reconditioned \$9.  
J-45 LEG IRON w/J-37 KEY used, \$12.00  
\*\*\*\*\*  
TRANSMITTER only from RT-77, #XMT/GRC-9, \$25.

## 38 TO 54 MHz RECEIVER



R-110 RECEIVER 38 TO 54 MHz FM CONTINUOUSLY TUNEABLE, VARIABLE SQUELCH AND AUDIO OUTPUT IMPEDANCE 600 OHMS. 4.3 MHz. I.F. WITH TUBES 3/1U4, 2/1L4, 1A3, 2/3A5, 1S5, 2/3Q4, 2/6AK5 & 6B2. VOLTAGES REQ. 135 VDC @ 70 MA. AND 6.3 VDC 2 AMPS.

SIZE: 9x13x7 1/2; WT: 32 LBS. USED \$35.95

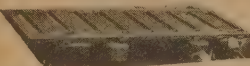
### R-108

RECEIVER, SAME AS R-110 ABOVE EXCEPT 20-28 MHz. USED \$21.95

### R-109

RECEIVER, SAME AS R-110 ABOVE EXCEPT 27-39 MHz. USED \$27.95

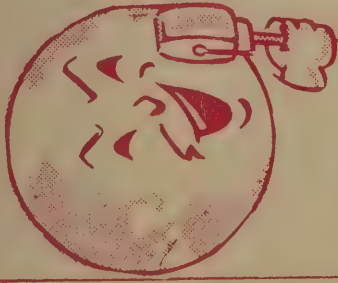
PP-282 POWER SUPPLY 24 VDC FOR R-108-109-110 RECEIVERS. MOUNTS INSIDE REC. USED \$5.95



SHOCKED-MOUNTINGS FOR GRC SERIES RADIO SETS. ALL HAVE APPROPRIATE CABLES & CONNECTORS

THAT GO FROM THE MTG. TO THE SET & BATTERY, BUT THEY DO NOT HAVE JUMPER CABLE UNIT-UNIT.  
MT-297/U HOLDS R/T, PS, REC., RT-70, AM-65, C434  
SIZE: 3 1/2 x 13 x 4 1/2; WT: 75 LBS. USED \$25.00  
MT-298/U HOLDS TWO (2) R/T & TWO (2) PS.  
SIZE: 3 1/2 x 13 x 4 1/2; WT: 85 LBS. USED \$20.00  
MT-299/U HOLDS ONE RT-66, 67, OR 68 & ONE PS  
SIZE: 18 x 13 x 4; WT: 50 LBS. USED \$25.00  
MT-300/U HOLDS (1) RT-70 & AM-65 (PIGGYBACK)  
SIZE: 8 1/2 x 13 x 3 1/2; WT: 25 LBS. USED \$22.00  
MT-327/U HOLDS ONE RT-66-67-68, ONE R-108-109-110, ONE PP-109-110; 32 lbs sh. Unused, \$25





STUFFER  
#10-84

Odds & ends  
and late arrival  
items; prices  
F.O.B. Lima, Oh  
good thru 2-85.

# Fair Radio Sales Co.

P.O. Box 1105 - - 1016 E. Eureka St.  
Lima, Ohio 45802  
419/223-2196  
419/227-6573

## CLEARANCE SALE

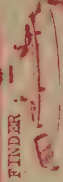
### 0.1-30 MHz 345 RECEIVER

G133 HF RECEIVER,  
0.2 to 30 Mhz SSB,  
AM, CW in thirty  
bands; continuous  
tuning in each band  
Set is a Collins  
51S1 receiver re-



packaged by LTV-Temco for mil-  
airborne use with extended lower frequency  
range, jack for 14-600 KHz LF tuner, AM BFO,  
and extra electronic filtering. Crystal check  
points every 100 KHz. 500 KHz final IF. AM  
BFO dial has 500 increments for varying BFO  
from 485-515 KHz. Controls for CW-LSB-USB-AM,  
rejection tuning, and RF-10DEB-ODEM meter  
switch. Input impedance 50 ohms. Output: 4 or  
600 ohms. Matching phone patch impd.: 500-  
600 ohms. With tubes 5/6EA8, 3/6BA6, 2/12AX7,  
2/6136, 6CD6, 5670, 6BF5, and 6AK6. Requires  
115/230 VAC 50-400 Hz; also 24 VDC 168 ma for  
AM BFO only. 64x18 1/2x13; 40 lbs sh.  
Used, repairable, ~~\$825.00~~ \$600.00.

### PRD-1 DIRECTION FINDER



R-395/PRD-1 RADIO DIRECTION FINDER  
100 KHz to 30 Mhz AM-CW-ICW  
in seven bands; FM over  
12.5-30 Mhz. 34 KHz band-  
width. 100 KHz crystal  
calibrator for bands 1-3



## PRR-9 RECEIVER

AN/PRR-9 FM HELMET RECEIVER, extremely lightweight single channel radio in the 47-57 Mhz FM range; 5 mw nominal power output. Uses CR-81 type crystal (not available); 455 KHz IF. Requires 5 V 25 ma originally supplied by BA-505 battery (not available).

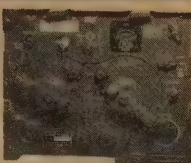
With AS-1998 antenna and H-264 headset. 7x3x1 1/2, 2 lbs. Used \$38. Less AS-1998/H-264 \$25. OPERATOR'S MANUAL for PRR-9, \$7.50

ID-1189/PR CHANNEL ALIGNMENT INDICATOR, designed to test AN/PRR-9 and AN/PRT-4 transmitter. Has 47-57 Mhz signal generator; checks both sets' batteries. Instructions, probes, and transit case included. 12x11x6, 15 lbs sh. Used, \$45.00

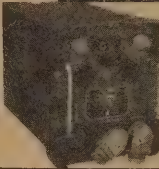


## RECEIVER-TRANSMITTER

RT-68/GRC TRANSCEIVER, 38-54.9 Mhz FM continuously tunable or 100 KHz-step channels or two preset channels. Receives and transmits both voice and 1600 Hz ringing FM; range 10-15 miles. Receiver circuit has variable 1st IF 4.45-5.45 Mhz and fixed 1.4 Mhz 2nd IF; also squelch and 600 ohm audio output. Transmitter uses crystal-controlled oscillator and oscillator power amp; power output 2 watts (LO) or 15 W (HI). Also meter to monitor transmitter filaments and 90 V input. Requires external power supply available separately. With tubes 4/1U4, 2E24, 2/1A3, 2/1L4, 4/1R5, 2/1A6, 1S5, 4/3Q4, 3A4, 3/3A5, 2/3B4, 6AK5. 9x13x1 1/2, 42 lbs. \$55.00  
RT-66/GRC, as above but 20-27.9 Mhz, \$27.50  
RT-67/GRC, " " 27-38.9 Mhz, \$35.00



## GRC - POWER SUPPLIES



PP-1175A/SR TRANSISTORIZED 115 VAC 60 HZ POWER SUPPLY, provides voltages to operate a RT-66, -67, or -68 plus a R-108, -109, or -110 receiver. Includes power connector, auxiliary receiver connector, & manual. 9x7x1 1/4, 40 lbs sh wt. Unused, original-boxed \$85.



PP-112/GRC 24 VDC POWER SUPPLY for RT-66-67-68 transceivers; provides all voltages from 24 VDC 6.5 amp input. 7x9x13, 39 lbs sh. Used \$25. Unused, \$35.  
PP-109/GRC SUPPLY, as above but 12 VDC 13 A input; used \$34.50

CX-1209 or CX-1210 CABLES f/RT-66-7-8 \$10 ea.

## PRC-10 RECEIVER-TRANSMITTER

RT-176/PRC-10 RADIO RECEIVER-TRANSMITTER; PORTABLE UNIT OPERATING FROM 38 TO 54.9 Mhz FM VOICE COMMUNICATIONS. THE RECEIVER SECTION HAS AN IF OF 4.3 Mhz AND AN AUDIO OUTPUT IMPED. OF 600 OHMS. TRANSMITTER OUTPUT IS 0.9 WATTS WITH A NORMAL RANGE OF ABOUT FIVE MILES. MICROPHONE INPUT IMPED. 150 OHMS. BOTH RECEIVER AND TRANSMITTER SECTIONS ARE CONTINUOUSLY TUNEABLE. WITH CONTROLS FOR VOLUME, TUNING, SQUELCH, POINTER ADJUST AND DIAL LOCK. CONNECTOR FOR EXTERNAL SPEAKER. WITH TUBES 9/5678, 2/5672, 3/5676, 1A4 AND 5A6. POWER REQUIRED: 135 VDC, 67 VDC AND 1 1/2 VDC. LESS BATTERY CASE. ACCESSORIES LISTED ELSEWHERE. SIZE: 9x3x10 1/2 WT: 9 LBS.  
RT-176/PRC-10 USED \$29.50



RT-174/PRC-8, SAME AS PRC-10 EXCEPT 20.0 TO 27.9 Mhz. USED-COMplete, NOT CHECKED, \$30.

RT-175/PRC-9, SAME AS PRC-10, EXCEPT 27.0 TO 38.9 Mhz. USED, COMPLETE.

AM-598 AMPLIFIER POWER SUPPLY, functions as 24 VDC supply and audio amp for PRC-8-9-10 transceivers which plugs into top. With audio cable and tubes OC3 2/12AT7, 2/26E6, 26Z5; 11x11 1/2 x10 1/2, 36 lbs sh. Unused \$36.00  
CX-2031 BATTERY CABLE for AM-598, \$8.00 ea.



## ACCESSORIES

CY-744/PRC BATTERY CASE f/PRC-8-9-10, \$6.00  
AT-272A goose-neck antenna base, unused, \$2.  
AT-272 FLAT RIBBON ANTENNA f/PRC-8-9-10, \$3.  
AB-129 RUBBER BASE f/AT-271 (PRC-8-9-10) \$3.  
AB-591 RUBBER BASE f/AT-271 (PRC-25-77) \$3.  
AM-598 SHOCKMOUNT \$5. WM-46 CABLE, 10' \$10.  
M-29 MIC w/UG-77, \$5. M-80 MIC w/UG-229 \$10  
HANDSETS, H-33 w/UG-77 \$10. H-189 w/UG-229 \$12  
LS-166/U LOUDSPEAKER Used \$12 w/set purchase  
GRC/VRC CONNECTORS, specify type and with what equipment used, \$3 each w/set purchase.  
PLUGS, used: UG-77, metal back \$3. UG-229 \$4.  
CX-1211 CONN. ASSY. f/RT66-7-8 to PP112, \$6.  
Connector assy. sold only with set purchase.

## PRC-6 WALKIE-TALKIE



RT-196/PRC-6 FM TRANSCEIVER, single channel crystal-controlled in the 47 to 55.4 Mhz range. Range: approx. 1 mile depending on terrain and conditions. Handheld unit has push-to-talk switch, volume control, ribbon antenna, carrying strap, and provision for H-33/PT handset. Uses type CR-23 crystal (not included or available). With tubes 6/5678, 3B4, 3/5672, 2/5676, and 2G21. Requires 1.5, 45, and 90 VDC; 15x5x4 1/2, 6 lbs sh. Used, \$18.95; MANUAL, \$7.50

CY-853/PRC-6 CASE, space and padding for 42 crystals; 6x2x6 1/2, 2 lbs. Used, \$3.00

ID-292/PRC-6 CHANNEL ALIGNMENT INDICATOR, plugs into RT-196 and indicates relative level voltages for B+ filament, osc. injection, limiter, discriminator output, and P-A grid. Also P-A current and calibrate adjust. Unit is basic VTVM with 1 1/2 sq. FS-500 ua-meter and 5678 tube. Power from set under test. ID-292, unused w/manual, \$22.95

## GRC/PRC BATTERY TEST

AN/PSM-13 BATTERY TEST SET; DESIGNED TO CHECK GRC AND PRC-TYPE BATTERY PACKS INCLUDING BA-270, -279, -376, -377, -386/PRC-25, -398/PRC-25, -399, and -505. METER INDICATES BAD-GOOD (FS=1 MA). WITH ADAPTERS U-240, -241, -242, -297, -314, -315, -346 AND CANVAS CASE. SHPG. WT: 7 LBS. PRICE: USED, EXCELLENT, \$24.95



ME-61/GRC FIELD STRENGTH METER 1.4 TO 24 Mhz IN THREE RANGES. WITH VARIABLE TUNING, SENSITIVITY CONTROL, 1 1/2" SQUARE METER, PHONE JACK AND ANTENNA. SIZE: 5x5x4 1/2 WT: 5 LBS. UNUSED, \$24.95



RT-70 RECEIVER-TRANSMITTER 47 to 58.4 Mhz FM VOICE COMMUNICATIONS.

FEATURES CONTINUOUS TUNING OR TWO PRE-SET CHANNELS AND PUSH-TO-TALK TRANSMISSION. THE RECEIVER CIRCUIT IS THE DUAL CONVERSION TYPE WITH THE 1ST IF IF Mhz AND THE 2ND IF 1.4 Mhz. WITH VARIABLE SQUELCH CONTROL. 600 OHM AUDIO OUTPUT IMPEDANCE. THE TRANSMITTER CIRCUIT HAS A 500 MW OUTPUT AND AN AUDIO INPUT IMPED. OF 150 OHMS. POWER REQUIRED: 90 VDC @ 80 MA, 6.3 @ 360 MA AND 6.3 @ 160 MA. WITH TUBES: 6/1U4, 3/1L4, 2/1R5, 1S5, 1A4, 4/3Q4, 3A5, AND 3B4. RELATED ACCESSORY EQUIPMENT LISTED ELSEWHERE. SIZE: 4 1/2x13x8, 22 lbs sh. Unused, \$32.95



AM-65/GRC AUDIO AMPLIFIER, 3-channel audio amp for RT-70 and also used for interphone in other GRC systems. PP-281-282 or 448 power supply may be placed inside to power RT-70. 4 1/2x13x8, 17 lbs sh. Used, \$14.95; Unused, \$22.95  
PP-282 SUPPLY, 24 VDC in for AM65/RT70, \$5.

AN/VRC-10 RADIO SET, consists of RT-68, PP-112, MT-299 mount, CX-1211 cable, and manual described separately on this page; 90 lbs sh. Used, \$85.00  
\*\*\*\*\*  
UNUSED AN/VRC-10 in wood crate; contains units listed above plus AB-15 antenna base, MS-117/AB-24 mast section CW-206 antenna bag, UG-530 RF cable, spare fuses, hardware, etc. 182 lbs sh. Unused \$115



TECH MANUALS WITH SCHEMATICS FOR:  
RT-196/PRC-6...\$7.50  
PRC-9A-10A...\$7.50  
RT-66,67 & 68...\$5.00  
RT-70...\$5.00  
R-108, 109 & 110...\$7.50  
AM-598...\$3.00  
PP-109 & 112...\$5.00  
AM-65...\$5.00  
AN/VRC 13-15 or AN/VRC 16-18, CONTAIN INFO & SCHEMATICS ON RT-66,67,68, R-108,109,110,PP-109,112, VAR. MTG. CONTROL BOX ES. \$7.50

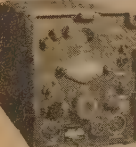
## 2 TO 12 Mhz TRANSCEIVERS

RT-77/GRC-9 BACKPACK TRANSCEIVER, covers 2-12 Mhz AM CW in bands 2-3.6, 3.6-6.6, and 6.6-12 Mhz; HI-LO outputs 7/1 watt (AM), 15/5 W (CW). Receiver section has 456 KHz IF and calibration points every 200 KHz. Transmitter can be continuously tuned or two preset channels; uses 2E22 tube in power amp. Set also includes tubes 2/1L4, 3/1R5, 1S5, 3/3A4, 3Q4; requires 580 vdc 100 ma, 6.6 vdc 2 amp, 120 vdc 45 ma, 1.5 vdc 500 ma, 6.9 vdc 575 ma. RT-77 was used in field and vehicular installations with a number of power supplies designed for it such as GN-58 handcrank generator available below, PP-237 6-12-24 VDC vibrator supply, DY-88 (12 VDC) & DY-105 (24 VDC) dynamotor supplies, PP-327 115 VAC supply. 16x13 x8, 35 lbs sh. Used, \$39.95; MANUAL, \$8.50



GN-58 HANDCRANK GENERATOR, with legs, seat, two cranks; powers RT-77 at reduced outputs 3.6 W (AM), 10 W (CW). 39 lbs sh. Used \$35.  
CONNECTOR for GRC-9 as available, \$4 w/set.  
HS-30 HEADSET w/CD-604 cord, used, \$7.50  
T-17 MICROPHONE used \$6.95; reconditioned \$9.  
J-45 LEG IRON w/J-37 KEY, used, \$12.00  
\*\*\*\*\*  
TRANSMITTER only from RT-77, #XMT/GRC-9, \$25.

## 38 TO 54 Mhz RECEIVER



R-110 RECEIVER 38 to 54 Mhz FM CONTINUOUSLY TUNEABLE, VARIABLE SQUELCH AND AUDIO OUTPUT IMPEDANCE 600 OHMS. 4.3 Mhz. 1 F. WITH TUBES 3/1U4, 2/1L4, 1A3, 2/3A5, 1S5, 2/3Q4, 2/6AK5 & OB2. VOLTAGES REQ. 135 VDC @ 70 MA. AND 6.3 VDC 2 AMPS.  
SIZE: 9x13x7 1/2; WT: 32 LBS. USED \$35.95

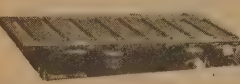
R-108

RECEIVER, SAME AS R-110 ABOVE EXCEPT 20-28 Mhz. USED \$21.95

R-109

RECEIVER, SAME AS R-110 ABOVE EXCEPT 27-39 Mhz. USED \$27.95

PP-282 POWER SUPPLY 24 VDC FOR R-108-109-110 RECEIVERS. MOUNTS INSIDE REC. USED \$5.95



SHOCKED-MOUNTINGS FOR GRC SERIES RADIO SETS. ALL HAVE APPROPRIATE CABLES & CONNECTORS

THAT GO FROM THE MTG. TO THE SET & BATTERY, BUT THEY DO NOT HAVE JUMPER CABLE UNIT-UNIT.  
MT-297/U HOLDS R/T, PS, REC., RT-70, AM-65, C434  
SIZE: 3 1/2x13x4 1/2; WT: 75 LBS. USED \$25.00  
MT-298/U HOLDS TWO (2) R/T & TWO (2) PS.  
SIZE: 3 1/2x13x4 1/2; WT: 85 LBS. USED \$20.00  
MT-299/U HOLDS ONE RT-66,67,OR 68 & ONE PS  
SIZE: 18x13x4; WT: 50 LBS. USED \$25.00  
MT-300/U HOLDS (1) RT-70 & AM-65 (PIGGYBACK)  
SIZE: 8 1/2x13x4 1/2; WT: 25 LBS. USED \$22.00  
MT-327/U holds one RT-66-67-68, one R-108-109-110, one PP-109-110; 32 lbs sh. Unused, \$25





**STUFFER  
#10-84**

Odds & ends  
and late arrival  
items; prices  
F.O.B. Lima, Oh  
good thru 2-85.

**CLEARANCE  
SALE**

# Fair Radio Sales Co.

P.O. Box 1105 - - 1016 E. Eureka St.  
Lima, Ohio 45802  
419/223-2196  
419/227-6573

## WIRELESS AMPLIFIER

**WPT-2** TRANSISTORIZED WIRELESS AMPLIFIER BY FANON; DESIGNED FOR USE WITH CALL-ORIGINATOR BOX (NOT AVAILABLE) AS A PAGING/INTERCOM SYSTEM WITHOUT LINES. 4 WATTS PEAK. OPERATES FROM 115 VAC 60 HZ AND MUST BE IN SAME AC CIRCUIT AS THE CALLING BOX. USABLE WITH TWO 8 OHM SPEAKERS OR THREE OR FOUR 45 OHM ONES. MAY BE MOUNTED INDOORS OR OUT. SIZE: 4 1/2 x 8 1/2 x 3; SH WT: 5 LBS. ~~USED, w/1mpo, \$7.95~~  
**WP-1**, like WPT-2 but no talk-back feature, \$5.95

## SEIKI PRINTERS

**EP-101** SHINSHU SEIKI-DIGITAL PRINTER; 21 COLUMN PRINTER, PRINTS CHARACTERS 0 THRU 9, -, OVERFLOW, PROGRAM, PLUS OTHER SPECIALIZED SYMBOLS. USES 3 1/2" WIDE PAPER; PRINTS 2.8 LINES/SECOND. PARALLEL DATA ENTRY. MOTOR REQUIRES 17 VDC (+3 VDC). SIZE: 4x6x5-3/8; SHGP. WT: 7 LBS. USED, REMOVED FROM EQUIPMENT. ~~Good condition, \$15.~~

**EP-101, AS-IS f/parts \$7.**



**35 MM RECORDING CAMERA MAGAZINE** TYPE C-7, DESIGNED FOR AIRCRAFT CAMERA BUT CAN BE ADAPTED TO OTHER EQUIPMENT. UNIT ACCEPTS 35 MM FILM ON 2-5/8" DIA. REELS; HAS SPROCKETS, GUIDES, AND MARKED THREAD PATTERN. 1" DIA. DRIVE ASSEMBLY PARALLEL TO PICTURE PLANE. WITH COVERS FOR FILM COMPARTMENT AND MOUNTING FACE. 3-7/8x5 1/2x5 1/2; 8 LBS. SH. USED, \$10.00

## ACCURAY SWITCH DEVICE

**ACCURAY DIGITAL SWITCH**, has access key look that actuates a SPDT switch connected in circuit to a lighted push button "enter" switch. Unit also has four section decimal-coded thumb switch--each section numbered 0 thru 9--and 15" input/output cable with connector. In 8x4x5 steel case with flange mount. 8 lbs shwt. #ACCU-DS, used, ~~\$12.95~~ \$8.

## ANTENNA HORN

**AT-903/G** ANTENNA FEED HORN f/ 600-1850 Mhz range. 50 ohms impedance; type C connection. Has locking 11-position elevation adjust. Fits 2 1/2" dia. mast. Aluminum. 35"x26"x21" 40 lbs. Shipped via truck only. Used, ~~\$100.00~~

**AT903 no elevate mount \$25**

## AIRCRAFT SIGHT



**OPTICAL GUN SIGHT** p/o APG-59; has 3-3/8" dia convex lens, 4" dia polarizing filter, and two coated view glasses--one 4 1/2" dia, the other 4" dia. Polarizer adjusts on scale marked VEL 25-50-100-200; 0-280 vernier scale for adjusting plexiglass viewing screen. Also includes 3 push buttons, and transformer marked "47 WV." edges; no further info. Looks like item for the collector or experimenter. 8x7 1/2 x7, 15 lbs sh wt. #OPS-1900, used, ~~\$25.95~~  
**#OPS-1200, AS-IS, some parts missing, \$15.00**

## GE PROGRESS-LINE

**GE PROGRESS-LINE 50 WATT MOBILE TRANSCEIVER**, single channel crystal-controlled in the 144-174 FM Mhz band Has #4ER25C2 receive, #4ET-21A2 transmit, and #4KP2B vibrator power supply sections. Transmit deck uses two 6146 tubes in P-A. Power supply requires two vibrators (not available) for 12 VDC operation. Internal trimmers for antenna tuning, coupling, and P-A plate; 21 tubes. 6 1/2 x 14 1/2 x 15 1/2, 34 lbs sh. #MA R/36N, used less crystal and cover, \$45.00  
**S318-CCT CONTROL PLUG, \$3. POWER PLUG, \$2.50**



**GE CONTROL HEAD** for Progress-Line sets; with push-to-talk mic, squelch, volume control, and coil cord. 5 lbs sh wt; used, \$13. Less mic, \$4.95

**PROG-LINE SET, MT-36N** transceiver, control with mic, speaker, cables, \$55.

## R-1/ARR-1 HOMING RECEIVER

**ADAPTER**, converts 234-258 Mhz input signal to 540-830 KHz output. Input and output impedances: 50 ohms. W/ tuning dial, ant. trim, and 4/954 tubes. Unit has conversion possibilities. Req 12/24 VDC 280/140 ma, 220 VDC 10 ma. 3 1/2 x 4 1/2 x 2 1/2, 6 lbs. Damaged RF capacitor, used "as-is", ~~\$7.50~~ \$5.



**BC-1206C** 200-400 KHz RECEIVER with volume control and head-phone jack; 135 KHz IF. Requires 24 VDC; uses tubes 2/14H7, 14A7, 14R7, 28D7. Units are unused-as-is, may have age deterioration. 4 1/2 x 4 1/2 x 6 1/2, 8 lbs. Less tubes but 14A7 \$7.

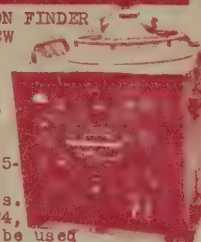
## Q.2-90 MHZ SSB RECEIVER



**Q133 HF RECEIVER**, 0.2 to 30 Mhz SSB, AM, CW in thirty bands; continuous tuning in each band Set is a Collins S1S1 receiver repackaged by LTV-Temco for mil-airborne use with extended lower frequency range, jack for 14-600 KHz LF tuner, AM BFO, and extra electronic filtering. Crystal check points every 100 KHz. 500 KHz final IF. AM BFO dial has 500 increments for varying BFO from 485-515 KHz. Controls for CW-LSB-USB-AM, rejection tuning, and RF+10DBM-0DBM meter switch. Input impedance 50 ohms. Output: 4 or 600 ohms. Matching phone patch imped.: 500-600 ohms. With tubes 5/6EAB, 3/6BA6, 2/12AX7, 2/6136, 6CD6, 5670, 6BF5, and 6AK6. Requires 115/230 VAC 50-400 Hz; also 24 VDC 168 ma for AM BFO only. 6 1/2 x 18 1/2 x 13; 40 lbs sh. Used, reparable, ~~\$825.00~~ \$600.00.

## PRD-1 DIRECTION FINDER

**R-395/PRD-1 RADIO DIRECTION FINDER** 100 KHz to 30 Mhz AM-CW-ICW in seven bands; FM over 12.5-30 Mhz. 34 KHz bandwidth. 100 KHz crystal calibrator for bands 1-2-3 (100-1200 KHz), 1300 KHz bands 4-5 (1.14-5.8 Mhz), and 4000 KHz bands 6-7 (5.5-30 Mhz). Has two tuned RF amplifiers using two 6AK5's. Also 7/1U4, 1R5, 2/1U5, 6C4, 3Q4, and 3A5. Designed to be used with diamond shaped AS-536 and AT-301 antenna which mounts on receiver's top. Requires 1.5, 6.3, -6, and 90 VDC. 18 1/2 x 13 1/2 x 13 1/2; 84 lbs net, 75 lbs sh wt. Used, reparable, \$105.00  
**MANUAL**, partial repro, \$12. Schematic only \$3  
**AS-536 & AT-301 LOOP ANTENNA**,  
**DY-79/PRD-1 DYNAMOTOR POWER-SUPPLY**, fits and plugs into bottom of R-395 and provides all the voltages for the receiver from 24 VDC 7 amp input 10x14x17, 38 lbs sh. Used,



**AN/PRD-1 DIRECTION FINDER SYSTEM**. Includes:  
**R-395**, DY-79, AS-536, AT-301, MT-870 receiver tripod, battery cable, partial repro of manual in wood transit cases CY-949, CY-950, and CY-954. 275 lbs sh **PRD-1 SET \$175.**

## R-518 RECEIVER



**R-518/FRR-27 RECEIVER**, SINGLE-CHANNEL CRYSTAL-CONTROLLED RECEPTION OF AM OR TONE SIGNALS IN THE 100 to 156 Mhz. RANGE. DOUBLE CONVERSION DESIGN WITH IF's of 23 Mhz and 3 Mhz. Audio OUTPUT: 1.5 WATTS INTO 200-600 OHMS, 15 MW PHONE. ANTENNA INPUT: 50 OHMS UNBALANCED. WITH SQUELCH AND TUBES 3/12AT7, 2/6AU6, 5654 2/6AV6, & 6005. POWER REQUIRED: 115 VAC 50-60 HZ. SIZE: 19x6x18 1/2; 45 LBS. USED, ~~\$45.00~~ \$30.

## 750 W TRANSMITTER

**TMC GPT-750 SSB TRANSMITTER**, 2 to 32 Mhz continuously tuned. Provides 750 watts AM, 750 W PEP-SSB and 1000 W CW and FSK. Same as AN/URT-17. Requires 115/230 VAC 50-60 Hz. 47x34x27, 750 lbs sh. Used, w/dummy panel-no exciter, ~~\$375.~~

**DYNA-VISION ACCESSORY UNIT#337** COMBINATION TACH-VOLTMETER. TACH RANGES 0-1000 and 0-5000 R.P.M. VOLT RANGE 0-18 VDC. USED FOR CHECKING R.P.M. AND LOW VOLTAGE CIRCUIT OF AUTO ENGINES, ALSO PROVISIONS FOR PLUGGING IN TIMING LIGHT. METER IS 4 1/2" CHROME AND SATIN FINISH WITH 500 MICROAMP. MOVEMENT. OPERATES FROM 6/12 VDC WITH TUBES 1/0A-2 & 1/2D21. SIZE: 13x5x5; WT: 8 LBS. PRICE: \$19.95



**\$9.95**



### COMPUTER FOUNDATION

DISPLAY CIRCUIT BOARD WITH EIGHT 3/8" 7-SEGMENT LED READ-OUTS, EIGHT RED LEDs, 15 DARLINGTONS, 8 PNP TRANSISTORS REGISTERED, PLUS OTHER COMPONENTS, BLOCK DIAGRAM. 10x3". #ECR7700, \$9.95

COMMUNICATIONS CIRCUIT BOARD, CONTAINS MODEM CARD WITH 1458 OP AMPS (NO SCHEMATIC), MAIN BOARD HAS TMS-6011 UART, INPUT SHIFT REGISTERS, AND GATES (TEN IC'S). ALSO INPUT TRANSFORMERS FOR 4- OR 2-LINE INPUT, MODELS, SELECT WIRING FOR 4- AND LEVELS 0 DBM, -3 DBM, OR -9 DBM. MODERN INFO. BLOCK DIAGRAM. #ECR9600, \$12.95

PRINTER LOGIC BOARD, THREE 200 VOLT 4 AMP TRIACS DRIVEN BY CONTACTS OF THREE 12 VDC REED RELAYS. ALSO HAS 2/4003 SHIFT REGISTERS, EIGHT DARLINGTONS, EIGHT PNP'S, 3/9002, AND A 4049 HEX BUFFER/CONVERTER. W/BLOCK DIAGRAM. 10x4". #ECR9060, \$7.95

CONTROL CIRCUIT BOARD WITH 24064 4-BIT MICROPROCESSOR, 2/4003 SHIFT REGISTERS, 3/4002 RAM'S, AND 8/4001 ROM'S. ALSO A 4.704 Mhz CRYSTAL, FIVE OTHER IC'S FOR CLOCK AND GATING, 12 IC SOCKETS, BLOCK DIAGRAM. 10x5, 3 LBS. #ECR9620, \$13.95

### Take 50% OFF PRICE boards.

MICROCOMPUTER POWER SUPPLY, USES TWO 3-TERM. REGULATORS AND A 723 WITH TIP3055 TRANSISTOR. INPUT: 115 VAC 60 HZ. OUTPUT: -25 VDC 180 MA; -5 VDC 800 MA, -15 VDC 1.25 AMPS. WITH SCHEMATIC. SIZE: 3x5x4; SHPG. WT: 10 LBS. #ECRPS-744, \$10.50

CREDIT CARD SCANNER, USES AN OPTICAL SYSTEM TO READ THE RAISED NUMBERS OF A CREDIT CARD INTO IN PHOTO ARRAY. HAS SMALL AC MOTOR TO DRIVE CARD THROUGH THE READER. ALSO LIGHT AND PLASTIC OPTICS, TWO ROCKWELL IC'S 10561 AND 15120. WITH DIAGRAM OF CONNECTOR WIRING. 5x5x4, #ECR2020, \$7.45

20-KEY KEYBOARD, 5/8" SQUARE BUSINESS KEYS WITH CHARACTERS: 0 THRU 9, CLR, RST, CRED, CASH, IMP, SEND, RET, CODE, \$, AND ACCT. TWO BUSES: ONE FOR NUMBERS, THE OTHER FOR INSTRUCTIONS. SIZE: 4x4, WT: 2 LBS. #ECR4835, \$3.95

### WIRE RECORDER

IC/VW-7 WIRE RECORDER, unit records only--no playback. Has single input channel; 600 ohm impedance. 290 R/W recording speed; 300 to 3500 Hz frequency response. Has volume control, mic and headphone jacks on front. With two 28D7 tubes and reel of wire for 60 minutes of recording. Requires 24 VDC for operation. 12x7x6, 17 lbs sh wt. Used, \$12.95 \$9.95

MI-3034/VW WIRE RECORDER MAGAZINE with 60 minutes of recording wire, magnetizing head other parts; 5 lbs. See page 9, used, \$6.95 \$5.95

### PANORAMIC SPECTRUM INDICATOR

IP-173 PANORAMIC SPECTRUM INDICATOR, SIMILAR TO SINGER SB-8T. DESIGNED TO SCAN AND ANALYZE RF SIGNALS TO IDENTIFY SIGNAL LEVEL, FREQUENCY, AND MODULATION. CAN BE USED TO DETERMINE CORRECT DEVIATION RATIO OF FM TRANSMITTERS. USABLE UP TO 1000 MHZ; DISPLAYS UP TO 1000 KHZ SPECTRUM WIDTH. CENTER FREQ: 5 MHZ. BANDPASS: 4.5 TO 5.5 MHZ. IF TRANSFORMERS TUNED TO 1.5 MHZ; FM OSCILLATOR MEAN FREQ: 6.5 MHZ. INPUT IMPEDED: 50 OHMS. DIRECT SENSITIVITY: 100 UV FOR 4" DEFLECTION ON CRT @ 5 MHZ. SAW-TOOTHED SWEEP: RATE 1 HZ (NON-SYNCHED). 5, 30, AND 25 TO 35 HZ VARIABLE. HAS SUP7 CRT. POWER REQUIRED: 2/6.3 VAC, 265 VA. SH. -450W, REPAIRABLE, \$60. 12x22x20; 68 LBS SH. USED, \$40.00

IP-173 WITH 115 VAC 60 HZ POWER SUPPLY AND INTERCONNECTING CABLE, \$90.00

MANUAL FOR IP-173, PARTIAL REPR., \$8.50

CONSTANT VOLTAGE TRANSFORMER FOR IP-173 SYSTEM, 95-130 VAC 60 HZ IN; 115 VAC 60 HZ (120 VA) OUT. #SOLA/IP-173, USED, \$30.00

IP-173 SET unused-complete with power supply, transformer, cable, book, \$125.

### CYCLOSCOPE

TS-344/UP SCOPE, 30 Hz to 1 Mhz response with 2AFL CRT. Rise-time: 0.25-30K usec. Sweep adjustable in 5 ranges from 10-50000 Hz. Input impedance: 62 ohm (low) or 450K ohms (hi). Input sensitivity: 0.1 to 1 V at low impedance. 6x8x15, 40 lbs sh. Gov't record., \$45. Manual, \$6.50 w/set. Used, repairable, \$79.50 \$55.00

### RADIO TELEPHONE LINK

AN/URC-47 RADIO TELEPHONE LINK, connects radio voice communications to two-line telephone systems. Consists of transmitter, receiver, and signal converter sections. Operates on a single crystal-controlled channel in the 132-150 Mhz band. Carrier output: 7 watts. Converter changes 20 Hz ringing signal into a radio transmittable 800 Hz signal and vice versa. Used in pairs, the sets can establish links up to three miles apart. With built-in speaker, tuning meter, and tubes 3/0A2, 3/0B2, 2326, 5R4, 4/6AX5, 2/6AX6, 64J5, 64S6, 6AX5, 2/6BA5, 2/6L6, 3/6X4, 4/12A7, 2/12A7, 2/12AX7, and 5763. Power required: 115/230 VAC 50-400 Hz. 21x14x22; 100 lbs. sh. Used, repairable, \$55. 144x22; 100 lbs. sh. Used, repairable, \$55.

### RADIATION INDICATOR

CP-95/PD RADIAC COMPUTER-INDICATOR, DESIGNED TO SHOW THE AMOUNT OF X- AND GAMMA RADIATION TO WHICH A DT-60/PD (NOT AVAILABLE OR SIMILAR SILVER-ACTIVATED PHOSPHOR GLASS RADIATION DETECTOR TUBE HAS BEEN EXPOSED. AN EXPOSED DETECTOR GLOWS ORANGE IN DETECTOR LIGHT. THE INTENSITY OF THE LUMINESCENCE IS MEASURED BY A 931VA PHOTOMULTIPLIER TUBE. THE OUTPUT OF THIS TUBE IS THEN TRANSLATED INTO ROENTGENS. THIS TUBE IS SHOWN UPON A 0-200-600 ROENTGENS METER AND IS SHOWN UPON A 0-100 U.A. SET INCLUDES FRONT COVER AND TUBES 5726, 5814, 931VA, CK1039 (OR 6143). SIZE: 9X9x17; SHPG. WT: 30 LBS. PRICE: UNUSED, \$19.95; MANUAL, \$5.00

### RF AMP & DRIVER for 166 Mhz

has four removable silver-plated cavities each 3.4" lg x 0.6" dia mounted on 11.5x1.6x1.1" silver-plated chassis. Also contains 2/2.5-8 pf differential capacitor, 2.5-8 pf capacitor, and tubes 6360, 3/6AX5, and 6AS6. Requires: 27 VDC, 200 VDC, and 350 VDC. First stage is mixer 149.67 + 6 Mhz; schematic included. 5 lbs. #W17-MRC used \$35.

#W12-MRC, same as above except has AC and 166 Mhz frequency; w/ schematic. Used \$9.95

### SG-321 LOW FREQUENCY FUNCTION GENERATOR, .008

to 1200 Hz square, triangular, or sine wave in five multiplier ranges. Max. output: 35 p-p. Synchron pulse 22.5 V peak neg., less than 5 u-sec duration. Internal impedance: 40 ohms. Output balanced or single-ended; 19 tubes. Requires 115/230 VAC 50-400 Hz. 12x19x14; 65 lbs sh. Unused, \$65.00

### MX-991/U FLASHLIGHT

official rugged, right angle military type made in U.S.A. Operates from two "D" cell batteries (not included). Has clear diffuser, red signal, and white opaque spare lenses which store in handle; metal belt clip. O.D. green plastic. 8 1/2"x1 1/2" dia. Unused, \$5.75

### 48 VDC HORN

for Bell System; volume adjust. Steel construct; with enclosure. 4x4x1.3, 2 lbs. #KS12037-L2, NEW, \$6.95

### DM-34 Dynamotor

for BC-603/683; 12 VDC operation; Unused, \$12.00

### DM-35 Dynamotor

for BC-604/684; 12 VDC operation; Unused, \$20.00

### JOHNSON Desk Mic

push-to-talk bar; wire for 600 or 50K ohms. W/coil cord you install. NEW \$12.95

### Sparton Auto Horn

12 VDC replacement; 2 lbs. #SA-OEM-12V, NEW, \$7.95

### BOONTON 170A Q METER

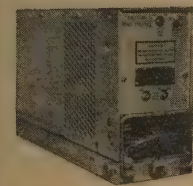
30-200 MHz; used-repairable w/ partial book, \$125.00





R-394/U RECEIVER, 152-172 Mhz FM single channel crystal-controlled. Dual conversion unit has first IF 7.8 Mhz and 455 KHz second IF; also squelch and muting circuits. 8 ohms output impedance. Set features modular construction with plug-in units 1st RF amp, local oscillator, 1st IF amp, 2nd IF and discriminator, and audio/squelch. 455 KHz selective filter is wired in. Also has compartment for modular power supply which is listed elsewhere on this page. Includes tubes 14/5678, 4/1AD4, 5672, 5840, 5783, and 6AK6. 8 1/2 x 5 1/2 x 14 1/2 22 lbs sh. Used \$10.95; Gov't second, \$19.95

R-257 RECEIVER, same as R-394 except covers 25 to 50 Mhz FM, used, \$12.95



T-278/U TRANSMITTER F.M. 152 to 174 MC APPROX. 30 WATTS, CRYSTAL CONTROL ON ANY TWO (2) PRESET FREQ. PHASE SHIFT MODULATION 15 KC DEVIATION, CR-27/U CRYSTAL UNIT FREQ. RANGE 4750-5437.5 KC. MULTIPLIED 32 TIMES. WITH TUBES 2/3B4, 3/2E24, 4/5678, 2/5672 AND 2/1AD4.

VOLTAGES REQUIRED AS SHOWN WITH DY-93 DYNAMO TCR ELSEWHERE ON THIS PAGE. USED \$14.95  
SIZE: 8 1/2 x 4 1/2 x 14 1/2; WT: 12 LBS. UNUSED \$19.95

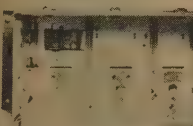
AN/VRC-19 6 VDC RADIO SET, includes R-394, T-278, DY-100, CY-938, C-847; 100 lbs. \$48.



VIBRATOR POWER SUPPLIES for R-394 and R-257 receivers; fits inside receivers; 10 lb PP-867, 24 VDC input, \$4.95 PP-868, 12 VDC input, \$5.95 PP-846, 115 VAC 60 Hz input, \$29.95

DY-93 DYNAMOTOR POWER SUPPLY for use with T-208-278-417 transmitters. Input: 12 VDC 20 amps. Output: 380 VDC 180 ma, 225 VDC 45 ma, -25 VDC 5 ma. 8 1/2 x 7 x 14, 29 lbs. Used \$9.95

CHASSIS CONNECTORS to fit R-394-257, T-208-278-416-417, DY-93-98 Specify for receiver (P252), transmitter (P401), or power supply (P1203), \$2.50 each.



CY-938 EQUIPMENT CABINET houses receiver R-257 or R-394, transmitter T-208 or T-278, power supply DY-93, -96, or -100. Aluminum; 17 1/2 x 11 1/2 x 25, 40 lbs sh wt. Used \$9.95

## RF MONITOR



ID-642/FSA RADIO FREQUENCY MONITOR, USES DIRECTIONAL COUPLER WITH IN-218 DIODE TO MONITOR RF VOLTAGE LEVEL. DC VOLTAGE IS AMPLIFIED TO TRIGGER A 24 VDC RELAY (6.5 MA 4PST) OVER A POWER SCALE OF 25-200. UNIT WAS PROBABLY CALIBRATED INTO A STANDARD LOAD. REQUIRES HN CONNECTORS. WITH TUBES: 2/OA2, 5751, 5670 6X4, AND TJ791K01 CURRENT REGULATOR. POWER REQUIRED: 115 VAC 60 Hz. SIZE: 11 x 19 x 10 1/2; SHPG. WT: 20 LBS. UNUSED, w/SCHEMATIC, \$7.95

BC-604 F.M. TRANSMITTER 30 W. FREQ. RANGE 20-27.9 Mhz. 10 PRE-SET CRYSTAL CONTROL CHANNELS ARE POSSIBLE WITH THE PROPER CRYSTALS. WITH TUBES 4/1619 & 1/1624 VOLTAGE REQ. 12 or 24 VDC & 625VDC @ 225MA. SIZE: 18 x 11 x 10 1/2; 60 LBS. PRICE: unused, \$25.00



CV-278 FREQUENCY SHIFT CONVERTER designed for RTTY operation of R-392 receiver and T-195 transmitter; usable with any receiver having 450-500 KHz IF. Signal Input and Discriminator meters; 28 VDC 2 A required. 9 1/2 x 7 x 13 1/2, 25 lbs sh. Used \$40. Power connect \$6 w/set.

## GE 'PROGRESS-LINE'

GE PROGRESS-LINE 50 WATT MOBILE TRANSCIEVER, single channel crystal-controlled in the 144-174 FM Mhz band Has #4ER25C2 receive, #4ET-21A2 transmit, and #4EF2B vibrator power supply sections. Transmit deck uses two 6146 tubes in P-A. Power supply requires two vibrators (not available) for 12 VDC operation. Internal trimmers for antenna tuning, coupling, and P-A plate; 21 tubes. 6 1/2 x 14 1/2 x 15 1/2, 34 lbs sh. #MA R/36N, used less crystal and cover, \$45.00 S318-CCT CONTROL PLUG, \$3. POWER PLUG, \$2.50



GE CONTROL HEAD for Progress-Line sets; with push-to-talk mic, squelch, volume control, and coil cord. 5 lbs sh wt; used, \$13. Less mic, \$4.95

MOTOROLA CONTROL HEADS, 1950's styles; similar features as above; used with mic, \$11.95

## MOTOROLA TRANSCIEVER

MOTOROLA FM MOBILE TRANSCIEVER, transmits in 144-174 Mhz range, receives between 450-470 Mhz. #TD6050AB transmitter section has output of 25 watts min. (144-167 Mhz), 20 W min. (167-174 Mhz) using single crystal-controlled channel. Crystal multiplication 24 times; 50 ohm output impedance. Has nine tubes including 6146 in power amp. #XRE1000-AH receiver has dual squelch "Private Line" or separate tone-controlled and carrier squelch circuits. Two crystal-controlled channels; 455 KHz final I.F. Audio output 2 watts into 3.2 ohms. With 14 tubes. #XPN-6003B transistorized power supply requires 12 VDC input to supply voltages for transmitter and receiver. Crystals and accessories not available. 6 1/2 x 10 1/2, 28 lbs. Used less 6146 tube, \$18.95 each. Schematic set, \$5.00



C-847 RADIO CONTROL BOX; USED TO CONTROL THE SYSTEM, HAS HEAVY ALNICO MAGNET 4" SPEAKER FOR MONITORING REC. CONTROLS FOR SQUELCH, VOLUME ON/OFF SW. PILOT LIGHTS AND RECEPTACLE FOR H-33 HANDSET WHICH HAS UG-77 SIZE: 9 1/2 x 5 1/2 x 3 1/2; WT: 6 LBS. Unused, \$9.95

## MOBILE TRANSCIEVER



AN/VRC-51 FM MOBILE TRANSCIEVER, single channel crystal controlled in 132-152 Mhz range; 30 watt output w/6146 in power amp; 22 other tubes. Internal trimmers for antenna tuning, coupling, and PA plate. Includes C-3691 solid-state power supply and control which has speaker, volume, and squelch; also interconnect cable. Requires 12 or 24 VDC; Comco mfg. 12 1/2 x 6 1/2 x 9, 27 lbs sh. Used, \$59.50; Mic, \$5.00 w/purchase.



R-901/GR RECEIVER, 0.54 to 20.5 Mhz AM-CW in five bands; 455 KHz IF. Bandwidth 1.5 or 4 KHz; has two Collins plug-in mechanical filters. Built-in crystal calibrator and controls for BFO, RF & AF Gain, Bandwidth, Power Select, Power Monitor, Band Switch, Ant Trim; meter monitors power. Operates from 24 VDC or 1.5 V 445 ma and 45 V 30 ma; 11 sub-mini tubes. 6 1/2 x 14 1/2 x 9, 25 lbs sh. Used-reparable, \$145.00

## C-845 RADIO CONTROL

C-845/U RADIO CONTROL, used with R-394-257 receivers and T-208-278-417 transmitters. Contains three tube microphone amp with line level meter which allows the signal to be adjusted to modulate the transmitter. Also has heavy duty 4" speaker for monitoring a receiver and tone generator for signaling purposes. Controls for intercom, mic level, and speaker volume and UG-77 plug. 600 ohm input impedance. Unit includes PP-846 AC power supply which mounts inside. Requires 115/230 VAC 50-60 Hz. 8 1/2 x 13 1/2 x 13 1/2; 40 lbs sh wt. Used, \$44.50; schematic, \$2.00



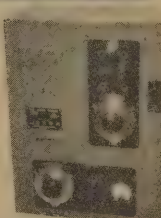
## 400 W AM TRANSMITTER

T-368/URT TRANSMITTER, 1.5 to 20 Mhz @ 450 watts CW, 400 watts AM. Uses master oscillator, frequency multiplier, intermediate power amp, and final power amp. Also 4-400A tube in the P-A, two 4-125's in the modulator, 1500 pf and 300 pf 10 KV vacuum variable capacitors in P-A. Input signal levels: 3-5 volts FSK, 30 V max external excitation. Input impedance: 56 ohms FSK, 1000 ohms external. Requires 115 VAC 50-60 Hz 1570 W (CW) or 2200 W (AM). 41 x 32 x 31, 650 lbs net. Sh wt: 940 lbs in wood crate as received from government. Used-good condition but not checked, \$495.00 Maintenance manual, partial repro, \$15.00

Input signal levels: 3-5 volts FSK, 30 V max external excitation. Input impedance: 56 ohms FSK, 1000 ohms external. Requires 115 VAC 50-60 Hz 1570 W (CW) or 2200 W (AM). 41 x 32 x 31, 650 lbs net. Sh wt: 940 lbs in wood crate as received from government. Used-good condition but not checked, \$495.00 Maintenance manual, partial repro, \$15.00

## ANTIQUE TRANSMITTER

RCA ET-8003 LF TELEGRAPH TRANSMITTER, "antique" unit transmits 700 Hz tone over 355-500 KHz; 30 watts output. Designed to operate from 1500 VCT 100 ma 350 Hz power input. Keying circuit is in-line with the power input so that keying makes or breaks the power circuit. The four #10 tubes are then modulated by the line frequency and produce the 700 Hz tone. Antenna coupling set by moving plug in to any one of six coil tap jacks. Has two National Velvet Vernier dials, two variometers, and 0-5 RF ammeter. 21 x 16 x 11, 30 lbs sh wt. Government-reconditioned, \$79.50



Original 350 HZ POWER TRANSFORMER for ET8003; primary 115 VAC 350 Hz, secondary 1500 VCT 100 ma. 10 lbs sh wt; unused, \$10.00

PP-638/U POWER SUPPLY USED WITH AM-494 & AM-495 POWER AMPLIFIERS. INPUT 115/230 VOLTS 50/60 CYCLE, OUTPUT 1100 VDC @ 320 MA, 230 VDC @ 60 MA AND 6.3 VAC @ 5.2 A. 2 1/2" RUGGEDIZED METERS 50 MADC 500 MADC AND 1.5 KVDC ALSO BLOWER FOR COOLING. UPPER COMPARTMENT SIZE 15W X 9 1/2 H X 8 1/2 D. SIZE: 3 1/2 x 20 1/2 x 24 1/2; WT: 150 LBS. PRICE: RE-NEW \$79.50



T-195/GRC-19 TRANSMITTER, 1.5-20 Mhz AM-CW-FSK in ten bands, manual or auto tune. Power output 100 W (1.5-12), 90 W (12-16), 80 W (16-20 Mhz). Meters for PA grid, Cathode, Battery, and Modulation; uses two 4X150D's in PA and 20 other tubes. Requires 22-30 VDC 42 amp input (9 amp standby); 11 1/2 x 22 x 14 1/2, 135 lbs sh. Used-reparable \$125. MT-651 BASE for T-195 & R-392, 60 lbs, \$15. MANUAL for T-195, \$7.50; MANUAL f/GRC-19, \$10.



**RECEIVER POWER SUPPLIES w/ SPEAKER** for 115 VAC 60 Hz operation of the following  
BC-453-454-455-946  
R-23-24-25-26-27/ARC-5  
R-10-11-15-19-22 ARC-type  
BC-348 BC-659

Include dynamic speaker housed in metal cabinet with connecting cable, phone jack, volume control, BFO switch (if applicable). Output: 200/250 VDC 90/60 ma and 24 VAC 2 amps; usable with other receivers having similar requirements. Dimensions and parts vary with availability of materials. SPECIFY receiver type; 10 lbs. KIT, \$32. WIRED, \$40.

DC POWER SUPPLIES from 115 VAC 60 Hz input; our construction: KIT WIRED  
#24VDC2A, 24 VDC 2 amps, 12 lb \$17 \$22.95  
#24VDC4A, 24 VDC 4 amps, 14 lb \$20 \$25.95

## TRANSMITTER SUPPLY

TY-94A/GRC TRANSISTORIZED POWER SUPPLY, provides 550 VDC 150 ma, 250 VDC 120 ma, 20 VDC 20 ma, 200 VDC 100 ma, and 26 V 1.7 A AC or DC from 115/230 VAC 50-65 Hz or 26 VDC input. Looks like good supply for low to medium power transmitters. 9x11x13 1/2, 42 lbs sh wt. Used, \$59.50; Connectors (2), \$3 each.

FP-2054/GRC POWER SUPPLY for T-893/GRC-50 30 W SHF transmitter; regulated outputs +250 V 200 ma, +150 V 80 ma, +105 V 15 ma and unregulated +800 V 100 ma, +650 V 60 ma, +654 V 60 ma, +360 V 80 ma, 115 VAC 2.2 amps. Has transformers 1000 V 300 ma and 435 V 370 ma, 2/6080 tubes, front circuit breaker, AC outlet, and cooling fan. Requires 115 VAC 47.63 Hz; 7x16x17 1/2, 67 lbs. Used, \$54.95

## COMPUTER SUPPLY

COMPUTER POWER SUPPLY with popular outputs 28 VDC 9.6 amps and regulated 5 VDC 5 A, 12 VDC 5A, -12 V 2 A, -6.8 V 0.8 A. Operates from 100-125 VAC 60 Hz. Supply has many useful components such as transformer rated 39.8 VCT 8.5 A and 22.7 V 12 A, front panel w/(4) 10x2-7/8x1 1/2 heatinks and six 2N3055 transistors, (2) KE25005 bridge rectifiers, capacitors (3) 51000 mf and one 19000 mf 40 VDC, regulator PC board, other parts. Made in Canada for NCR. 10x14x12, 65 lbs sh. #M32-01-775, \$29.95; 2/\$50.

## 120 V 5000 HZ SUPPLY

LAMP POWER SUPPLY, an item for the experimenter who finds the 120 VAC 9000 Hz out from 120 VAC 60 Hz input intriguing or finds the supply a good source of usable parts. Consists of two 6x4x1 heatinks each w/2N3055, transformer w/2-4 VCT 500 ma outputs, ferrite core autotransformers, PC board. 4x8x3 1/2, 9 lbs. GE#9T69Y1500-G4, \$4.95

SOLA CONSTANT VOLTAGE DC POWER SUPPLIES; 19" x 6" 40 lbs. sh wt. \$14.95

SOLA #	INPUT	OUTPUT
28238	180/240 200/260	200 VDC 1.5 A
28239	"	120 VDC 1.1 A
		20 VDC 2.0 A
28233	115/208/230	120 VDC 2.0 A
28266	115/208/230	20 VDC 4.0 A

#237 CONSTANT VOLTAGE TRANSFORMER, 6.5 V 25 amp output from 90-130 VAC 60 Hz input, \$15.

## VERY HIGH VOLTAGE

DC POWER SUPPLY WITH 107-125 VAC 60 Hz PRIMARY. Two outputs: -5.4 to 5.75 Kv. @ 140 to 300 u-A. ONE OUTPUT: -5.1 to 5.3 Kv. @ 100 to 270 u-A. SIZE: 12x2x4 1/2 WT: 10 LBS. GE#9T63Y2029G6, Used, \$10.95

## COMPUTER POWER SUPPLIES

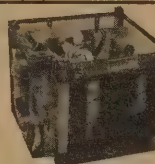
SOLID STATE POWER SUPPLIES rated conservatively and constructed on rugged steel frames. Units have front voltage adjust +10% running light, AC reset. Also adjustable current limiting and overvoltage protection. Power input: 115 VAC 60 Hz. Removed from equipment.

Add \$10.00 to prices for "checked" units.

RATING	SIZE	Sh wt	No.	PRICE
4 V 30 A	13x7x15 1/2	65 lbs	926	\$30.00
4 V 75 A	19x7x20	125 lbs	650	\$60.00
12 V 5 A	9x7x16	35 lbs	655	\$7.00

20-24 V 5.5 A 9x7x20 47 lbs 332 39.95  
24 V 12.5 A 13x7x15 1/2 65 lbs 4291 30.00  
(#4291 is harmonic regulated type)  
30 V 3 A 15x7x19 1/2 38 lbs 889 27.50  
32-36 V 4.8 A 9x7x19 37 lbs 3236-48 27.95  
(#3236-48 includes 12-36 V conversion info)

DUAL POWER SUPPLY, same style as above, -32-36 V 14.7 A and -32-36 V 10.3 A; Two independent regulators w/common buss. 20x12x14, 125 lbs sh. #450, \$60.00



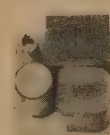
CASH REGISTER POWER SUPPLY WITH 6 VDC GEL-CELL BATTERY OUTPUT FOR MEMORY. ALSO +6, +10, +15, and -24 VDC FROM 115 VAC INPUT. 8x8x7 1/2; 22 LBS. SH. ORIGIN ELEC. #008-0202550A, UNUSED, \$45.00 \$25.

## OPEN FRAME REGULATED



COMPUTER POWER SUPPLY TRANSISTOR REGULATED OPEN CONSTRUCTION WITH ADJUSTABLE VOLTAGE 20% AND CURRENT LIMITING UNITS WHERE OVP IS NOTED ALSO HAVE ADJUSTABLE OVERVOLTAGE PROTECTION. UNITS ARE IN GOOD CONDITION-REPAIRABLE. ORDER BY RATING AND PART NUMBER.

RATING	SIZE	SH WT.	No.	PRICE
5v 2A	14x4x5	16	1012-01	\$10.95
5v 4A	"	16	1014-33	14.95
8v 4A OVP	"	16	1014-21	14.00
12v 3A OVP	"	16	1014-22	25.00
12v 6A	14x8x5	23	1018-32	35.00
12v 6A OVP	"	23	1018-22	37.00
30v 3A	"	23	1018-23	22.50
30v 3A OVP	"	23	1018-33	25.00
35-40v 500W OVP	14x8x5, 60 Lb.	1037-12	\$35	



PGC-29/1640 POWER SUPPLY, rated output 40 VDC 30 ma or 35 VDC 40 ma from 115/230 VAC 60 Hz input. However, the transformer is rated 180 VDC 40 ma and 6.3 V 1.7 A out. Also has 10 Hy 55 ma choke, 450 mf 50 VDC capacitor, 6X4 tube. 5x4x4 1/2, 5 lbs sh. Used, \$9.95

## SCOPE POWER SUPPLY

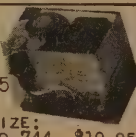


HFE CRT POWER SUPPLY; HAS 6.5 KV LOW CURRENT OUTPUT WHEN USED WITH 10 VDC 1.75 AMPS DC-TO-DC INPUT CONVERTER. WILL PRODUCE 7.5 KV FROM 12 VDC INPUT. OTHER LOW CURRENT OUTPUTS OF -2500 AND -1500 VDC. TRANSISTORIZED WITH COVER AND CONNECTORS. 11x6x5 1/2, 10 LBS. USED, EXC., \$15.95  
HFE LOW VOLTAGE POWER SUPPLY; OUTPUT: 10 VDC 1.75 AMPS, ADJUSTABLE -1 V. INPUT: 115 VAC 60 Hz. TRANSISTORIZED WITH FUSE AND CONNECTOR. 10x6x4 1/2; 12 LBS. REMOVED F/EQUIP., \$7.95  
HFE CRT AND LV POWER SUPPLIES AS SET, \$20.00



BREAKER 12.5 VDC 2.5 AMP POWER SUPPLY; 4 AMP SURGE, 4 AMP CIRCUIT BREAKER. 4-5/8x2 1/2x6 1/2; SHPG. WT: 6 LBS. #13-110, NEW, \$20.

MICROCOMPUTER POWER SUPPLY, USES TWO 3-TERMINAL REGULATORS AND A 723 WITH TIP3055 TRANSISTOR. INPUT: 115 VAC 60 Hz; OUTPUT: -25 VDC 180 ma; -5 VDC 800 ma, -15 VDC 1.25 AMPS. WITH SCHEMATIC. SIZE: 3x5x4; SHPG. WT: 10 LBS. #ECRPS-744, \$10.95



UNUSUAL TUBES for collectors and experimenters. Filaments checked but not guaranteed.

JAN 218 RECTIFIER TUBE, 1/2 wave high vacuum; jumbo 3-pin base. 15xHx5" dia \$10.  
250TH-R TRIODE w/bad filament 4-pin base; 10"Hx5 1/2" dia. \$8.  
JAN 705A RECTIFIER, 4-pin base. 5"H x 2 1/2" dia. \$5.  
JAN 715B PULSE AMP TETRODE 4-pin base, similar shape as 705A; 5 1/2"Hx2 1/2" dia. \$6.  
WESTINGHOUSE CL-2 TUBE WITH-IN-A-TUBE, 12xHx2" dia \$7.

## MAGNETRONS

MAGNETRON TUBES LESS EXTERNAL MAGNETICS. USED, \$24 EA. SPECIFY:  
2J26 (2992-3019 MHz); 2J28 (2939-2965 MHz);  
2J29 (2914-2939 MHz); 2J39 (3267-3333 MHz);  
2J61 (2992-3100 MHz); 2J62 (2914-3019 MHz);  
725A (USED IN APS-4 RADAR)

S-300 TUBE (OPEN FILAMENT), 10" LG. 3" DIA. As-Is, \$4.

500 MHZ TRANSMITTING TUBE 8012-A TRIODE  
DIRECT WIRE FILAMENT: 6.3 V. 1.92 AMPS.  
MAX. PLATE: 1000 V. 80 MA. 40 W  
CAP: G-F 2.7; P-F 0.4; G-P 2.5  
MU 18; GRID CURRENT 20 MA

CLASS "C", TELEGRAPHY 35 W W/DATA, UNUSED, TELEPHONY 20W \$2.00 EA. 4 FOR \$6.

8025 TRIODE, same as 8012 but 4-pin base, \$3.

ELECTRONIC PHOTO-FLASH TUBE R4330 SYLVANIA, OPERATING VOLTAGE 2250, 6 FLASHES PER/MIN 100 WATT-SEC/FLASH MAXIMUM, PEAK LIGHT OUTPUT 12,000,000 LUMENS, INTEGRATED LIGHT OUTPUT 3500 LUMEN SEC. FLASH. \$10 OCTAL CER.SOC. 50d

## THYRATRON

GE #4J51 SOLID-STATE THYRATRON, used-subject to test \$9.  
Amphenol #146-106 SOCKET for 4J51, 66J, \$2.

## FIELD TELEPHONES

TP-3 SOUND-POWERED FIELD TELEPHONE, portable hand-ringing magneto type. Two or more can be used in two wire system. Signaling range 15 miles; voice range less than 2 miles. With carrying case and strap. 8x10x3 1/2, 19 lbs. Used-checked \$55.

EE-8 FIELD PHONE, similar to TP-3 except requires two "D" cells instead of sound power and has extended voice range. WHITE

H-102 FIELD PHONE, similar to above except requires 3 and 6 VDC; 15 lbs. Used, \$30.00

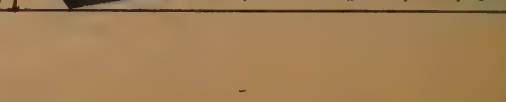
## 24 VDC 6 AMP SUPPLY

24 VDC 6 AMP POWER SUPPLY originally used in Xerox equipment but usable to power R-392 receiver and other equipment. Requires 105-125 VAC 60 Hz input. 4x9x8, 20 lbs. #AS-59134, used-checked, \$24.95

12 VDC 3.5 AMPS and 4 VDC 17.5 AMPS from 115 VAC 60 Hz input; has current limiting and overvoltage protection. 4 V output adjusts to 5 V; 14x8x6, 35 lbs sh. #9566WQ, \$30.00

#9566-LC, same as above power supply only less regulator cards. Has output transistors and heatinks; nice foundation, \$20.

230 VDC TRANSISTORIZED POWER SUPPLY, 115 VAC 60 Hz input. Units marked "200 VDC" but they test at 240 VDC 300 ma. 5x4x5, 15 lbs. #3930, NEW, \$22













**LEDEX**

**LEDEX HEAVY DUTY SOLENOID** #S-8210-025, 8-position 45° stroke, 28 VDC Starting torque: 5 lb-in @ 35 watts (15 lb-in holding) continuous duty. Up to 32.8 lb-in starting torq. @ 700 watts 1/20 duty. 7S size; 2 1/2" dia x 1-7/8" with 1/2"x3/8" dia. shaft. 4 lbs. Unused, \$4.95

**OPEN FRAME, SPDT 5.5-7.5 VAC COIL;** CONTACTS RATED 5 A 115 VAC. 1 1/2"x1-3/8" dia. Unused, \$1.25

#5945-233-1398, \$1.25

**ALLIED CONTROL T255X-18**, coil 115 VAC 2580 OHMS. GOLD-PLATED DPDT CONTACTS RATED 5 A 29 VDC. 1/2"x7/8" x 1-3/8". Unused, \$3.00 ea.

**4PDT RELAYS**, 110 VDC, heavy contacts. 2x2x1 1/2". Removed. #DOX187T, 5000 coil, \$2.00 #DOX137T, 24 VDC 230 A \$1.50

**DUAL COIL** each 3FST; one 24 VDC, other 48 VDC. PCB mtg. 2 1/2"x1 1/2"; #116-2601, \$2.50

**TIME DELAY/SEQUENCE RELAY**, has 3-SPDT & 1-DPDT 12 VDC 6 A. relays. Delay sequence ON/3.5s/5.0s/10 sec. Solid-state w/24 V 1 amp transformer, 250 mfd 50 VDC cap. 115 VAC 60 Hz input. 7 1/2"x3 1/2"x3 1/2" 3 lbs sh. #140-PI97C \$6.95

**SIGMA DC RELAYS;** OPEN-FRAME 2 AMP CONTACTS, 1 1/2"x2 1/2"x1 1/2" REMOVED F/EQUIP.

#41F1000S-SIL 12 VDC, \$1.50

**GUARDIAN ROTO-MITE STEPPER**, 12 VDC 12 position 3 amps resistive. 3x 1 1/2"x1 1/2"; #706-12P-12D NEW \$4.

**LEDEX PUSH-PULL SOLENOID**, 24 VDC short-stroke flat-face; size 5, 1-7/8" dia. 2 lbs. #124-033-001 NEW \$3.

\*\*\*\*\*

**DOLLAR DAZE RELAY PC BOARD**, 3-SPDT 12 VDC relays in 1x5/8x2 plastic cases \$1.50

**RHEOSTAT CONTROL UNIT FOR HEATED CLOTHING**; 100 WATT 5.75 OHM RHEOSTAT MOUNTED IN CONTROL BOX WITH INDICATOR KNOB ALSO ON/OFF SWITCH & DUAL LOCKING TYPE SOCKETS FOR INPUT AND CONTROLLED OUTPUT VOLTAGES. SIZE: 5x4x2; WT: 3 LBS. TYPE C-1C UNUSUED \$2.95

**E-T-A CIRCUIT RESET** push switches, type 45-700-P. Fits into 3/8" hole; requires 2" depth. O/A 1 1/2"x2 1/2"x2 1/2"; Used. 250 VAC 5 amp, \$2. 15 A, \$2.50

**MUTER 433-AC** 10K OHM POT, 1930's-40's precision pot; 1/2" dia shaft. 3 1/2"x1 1/2" dia. Unused \$4.

**STEPPING SWITCH** 8-deck 20-position 24 VDC Clare Type 20 6x6x2, 5 lbs. #A320759 \$10

#7709181-P6, 9-deck 25-pos 24 VDC \$7.50

#PWL5511 type 44, 5-deck 10 position 24 VDC, \$6.95

**ELECTROL 5 VDC 280 ohm REED RELAY**; 2 1/2"x1 1/2". #R-4376-2 \$2

**P&B KR-4175-1 DP-DT PLATE RELAY**; sealed metal can, requires octal socket. 2 1/2"x1 1/2"x1-3/8". Unused, \$2.00

**P & B 3PDT PLUG-IN TYPE RELAY** with 24 VDC COIL. 120 VAC 10 A. CONTACTS. #KUPI4015, w/socket, \$2.95

**AC CONTROL RELAY**, 120 VAC COIL; SPST N. OPEN 10 A. AND SPST N. CLSD. 10 A. CONTACTS. SEALED CAN, SOLDER TERM. 3 STUD MTG. 2 1/2"x1 1/2". #7321/6717, \$2.50

**ROTARY SOLENOID** has 48 VDC coil and 3/16" dia wafers w/complex switching action. Sold for solenoid only. Leduc #B-61818A used \$2.00

**RHEOSTATS**

**RHEOSTAT VALUES:** FIRST SET OF NUMBERS AFTER RHEO-PREFIX IS THE VOLTAGE. YOU INDICATE DESIRED OHMS IN SECOND SET.

SCD=SCREWDRIVER ADJUST.

#RHEO-25W-(ohms), \$1.25	1 2 5 6 10
	12 15 25 35 50
	60 75 100 125
	175 200 250 300 350
	400 500 600 650 1K 1500
#RHEO-50W-(ohms), \$1.75 ea	6 8.5 12 15 16
	17.5 20 30 35 45
	50 60 150 200 225
	375 220 500 2.5K 500 10K
#RHEO-75W-(ohms), \$2.25 ea	15 25
#RHEO-100W-(ohms) \$2.75 ea	20 100 500 1500 3.5K 5K
#RHEO-150W-(ohms) \$3.50 ea	0.5 10 750

300 WATT 0.2 ohms, NEW, \$10

**MIRRA 25 WATT "ANTIQU" POTS** w/ knob and pointer. Looks like those used in 1920's radios. Specify ohms: 6, 250, or 400. Unused, \$4.50

**10-T HELIPOTS**

10-TURN HELIPOTS 2 1/2"x1 1/2" dia; 1/2" dia shafts. Used.

10K OHMS 3-term 5%, 1/2" sht \$3

30K OHMS 3-term 3%, 1/2" sht \$3

50K OHMS 3-term 3%, 1/8" sht \$3.

**MODEL RB DUODIAL** counter dials for helipots, \$4.00

**DAVEN 50K OHM ATTEN VATORS**, used: #CP800/50K, 12-step 5%, \$4.50

**REED RELAY CIRCUIT BOARD**, 3/500 ohm and one 5K ohm 10-15 VDC reed relays w/large 1/8x1/16" contact area. Also one 26 VDC DPDT sealed relay 3/8x1/2x7/8 #792-312, unused, \$3.95

**CRYSTALS**

FT-241 CRYSTALS f/BC-604, 684; channels 0-79. No choice 3/1. Choice \$1.50

200 KHZ FT-241 XTAL, \$3.50

1000 KHz CRYSTAL, temp. coeff. 0.0001% (+10 Hz/°C. Octal base; f/BC221-TS323-1M21 freq. meters. Socket wiring may be changed. \$12.

**JK-02 CRYSTAL OVEN** FOR CR-26 CRYSTALS. OPERATES FROM 6.3-24.2 V. AC/DC, OCTAL BASE. MOTOROLA #251B1001 FOR ONE CRYSTAL AS USED IN R-394-257 RECEIVERS. \$1.95

MOTOROLA #251B1003 FOR TWO CRYSTALS AS USED IN T-278-208 ETC. TRANSMITTERS \$2.50

**CIRCUIT BREAKER**

**AIRCRAFT CIRCUIT BREAKERS**, 24 to 30 VDC. AN-3160 15 toggle style. AN-3161 push-button type. Removed. AN3160 25, or 50 amps, \$1.95 each. AN-3161 5, 10, 15, or 20 amps, \$1.00 each.

**HEINEMAN MODEL** AM12BK, 2 1/2"x2 1/2"x1 1/2" 12 VDC 3 A \$1.25 50 VDC 3 A \$1.35 50 VDC 40A \$1.50

AM1516 50 V 100A 4x3 1/2" \$4.

AM12 115 VAC 60 Hz \$1.50 ea

AMPS: .93, 1.75, 4.2, 5.15

**TRIPAK UPLI-11-676** 65 VDC 45 A; delay 51, trip 56.25 A. 2 1/2"x2 1/2". NEW \$3.

#UFG1-1RBC2, 65 VDC 1.25 amps; delay 51, trip 1.57 amps. Aux switch 10 amp 250 VAC. 2 1/2"x2 1/2", \$3.00

**HEINEMAN AM33MG3**, two pole 115 V 10 A; 1 1/2"x2 1/2"x2 1/2" \$2.50

**HEINEMAN CD2** type CIRCUIT BREAKERS, ganged two pole; 4 1/2"x2 1/2"x2 1/2" 2 lbs. NEW

#CD2-Z10-1, Rt 0.035 A DC Cur P. Lt 68 A 270 VAC 60 Hz Cur 3. \$4.00

#CD2-Z74-2, 10 A 132 VAC 60 Hz T.D. 2; 125 A 10 VDC T.D. 3. \$4.25

#CD2-A3-DU, two 18 amp 240 VAC T.D. 1. \$4.50

**P&B #375-207-101**, 7 amp 250 VAC or 32 VDC max. Recessed button. 2 1/2"x1 1/2". NEW, \$1.25

**HEINEMAN CIRCUIT BREAKERS:** #AM2511M6, 230 V 3.7 amps 3 1/2"x3 1/2", used \$2.25 ea

#J2A-A8-A, 240 VAC; hold 17 A, trip 21.25 A. \$2.

**MAGAZINES**

We carry current issues of

CQ \$2.00 QST \$2.50

Ham Radio \$2.50 73 \$2.50

**BOOKS & TECH MANUALS**

\$3.00 each \*\*\*\*\*

AM-598 \*\*\*\*\*

FP-867-868 \*\*\*\*\*

-869 \*\*\*\*\*

PP-846 \*\*\*\*\*

DY-93-98-100 \*\*\*\*\*

ARC-27 O.I. \*\*\*\*\*

ARN-59 O.I. \*\*\*\*\*

\$5.00 each \*\*\*\*\*

FP-175 \*\*\*\*\*

FU-143C \*\*\*\*\*

RD-60 \*\*\*\*\*

AN/38C-1 \*\*\*\*\*

I-208 \*\*\*\*\*

AN/PDR-27 \*\*\*\*\*

\$7.50 each \*\*\*\*\*

BC-312-342 \*\*\*\*\*

BC-605-604 \*\*\*\*\*

SK-28 repro \*\*\*\*\*

BC-652-653 \*\*\*\*\*

BC-659 \*\*\*\*\*

BC-620 \*\*\*\*\*

BC-1000 \*\*\*\*\*

BC-1335 \*\*\*\*\*

AN/PRC-8 \*\*\*\*\*

PRC-9A-10A \*\*\*\*\*

AN/GHR-5 \*\*\*\*\*

R-108-109 \*\*\*\*\*

-110 \*\*\*\*\*

R-257 \*\*\*\*\*

R-394 \*\*\*\*\*

T-278-416 \*\*\*\*\*

AN/ARN-12 \*\*\*\*\*

AN/CRT-3 \*\*\*\*\*

FGC-20 & 21 contains TT-98, -99, -100 and PP-978, \$10.

**SCHEMATICS**

REPRODUCTIONS of schematics \$1.50 and up. WRITE.

**TEST EQUIPMENT MANUALS**

AN/TRM-1 repro \$10.00

AN/URM-25D repro 10.00

AN/URM-25F repro 10.00

AN/URM-26B repro 12.00

SG-12/URM-48 repro 12.00

TS-403/URM-61 repro 12.00

TS-621/URM-52 repro 10.00

FR-5/URM-60 7.50

TS-610/USM-44 repro 10.00

AN/USM-50 repro 10.00

AN/USM-105 repro 17.00

AN/USM-116 repro 10.00

AN/USM-117 repro 15.00

AN/USM-140 repro 17.00

FR-149/USM-159 repro 10.00

BC-221 f/most models 7.50

Reproductions \$8.50 each:

ME-6D ME-26 Q3-8

SG-92 TS-148 TS-352

TS-375 TS-382 TS-433B

TS-497B TS-505 TS-1060

IP-173B PRM-10

TV-2, -7 or -10A \$10 ea.

**TEK G \$6.00 TEK H \$6.00**

W 6.00 1A1 8.50

1A2 7.50 1A4 7.50

1A5 7.50 130 6.00

131 6.00 132 6.00

453 8.50 556 8.50

CA partial repro, 8.50

**HICKOK 1805**, part-repro \$15

\*\*\*\*\*

**TOOLS & TECHNIQUES**, \$4.95

**AUDIO FREQ TESTERS**, 4.95

**RADIO FREQ TESTERS**, 4.95

**TEST EQUIPMENT**, 4.95

**TI SEMICONDUCTOR MEMORY BOOK** (1975), 272 pp, \$1.00

**1984 RADIO AMATEURS HANDBOOK** \$12.

**SOLID STATE BASICS f/amateurs** \$5.

**SOLID STATE DESIGN f/amateurs** \$7.

**ANTENNA BOOK**, theory and instruction on antennas, \$8.

**ANTENNA ANTHOLOGY**, articles from QST on antennas, \$4.

**LICENSE MANUAL**, a study guide for the novice, \$4.00

**UNDERSTANDING AMATEUR RADIO**, an introduction, \$5.00

**THE SATELLITE EXPERIMENTER'S HANDBOOK**, \$10.

**OPERATING GUIDE**, \$5.00

**HINTS & KINKS**, \$4.00

**FM & REPEATERS f/QST**, \$5

**ARRL LOG BOOK**, \$1.75

**RADIO FREQUENCY INTERFERENCE**, \$3. 1/C/F CALCULATOR \$3

**TUNE IN THE WORLD OF HAM RADIO**, wkbook & cassette \$3.50

**BASIC BOOK OF HAM RADIO**, \$4.95

**WEEKEND PROJECTS**, \$3.00

**200 METERS AND DOWN**, \$4.00

**VINTAGE RADIO**

VINTAGE RADIO 1897-1929, pictorial story of radio's early years; 1000+ pictures and commentary, 263 pp. Softbound, \$9.95;

A FLICK OF THE SWITCH 1930-1950, sequel w/TV, \$9.95

1921-1932 RADIO COLLECTOR'S GUIDE, listing of over 9000 radios; 1100 mfgs; 263 pp. Softbound, \$9.95

MOST-OFTEN-NEEDED 1926-1938 RADIO DIAGRAMS, reprint of Beitman's book of 600 old radio schematics, \$9.95

**TERMS:** All manuals include maintenance info & schematic unless noted otherwise. O.I. Operating info only N.S. No schematic repro -Partial reproduction w/operating, maintenance info & schematic.

\*\*\*\*\*

AN/ARC-5 BENCH TEST and ALIGNMENT, covers necessary info to align R-23A, R-148, R-25-26-27 receivers; T-18 thru T-22 xmitters; and MD-7 modulator. W/schematics; repro. \$7.50

\*\*\*\*\*

AN/ARC-27-55 \$15.00

AN/ARC-38 repro 17.00

AN/ARC-38A repro 20.00

RT427/ARC-39 repro 10.00

AN/ARC-44 8.50

ARC-60 (R19-CV431) 8.50

ARC TYPE 12 including R-10-11-15-19, T-11-13, and related equip. 8.50

AN/ARN-30 repro 10.00

R-648/ARR-41 repro 15.00

AN/ART-13 transmitter only, repro 12.00

AN/APR-4 repro 10.00

AN/ARC-9 8.50

AN/ARC-10 8.50

AN/ARC-19 10.00

AN/ARR-52 repro 17.00

R-395/PRD-1 repro 15.00

AN/URC-1 (T-14, R-19, and AM-8 pwr amp) 8.50

AN/TRC-8 (T30/R-48) 8.50

AN/VRC-19 (R394/T278) 8.50

R-391/URR repro 17.00

BC-AS-229 7.50

BC-348-J-N-Q repro 10.00

BC-348-K-L-R repro 10.00

BC-624/625 repro 12.00

BC-639 repro 8.50

BC-669 repro 8.50

BC-779/1004 10.00

CV-157 repro 15.00

CV-591 (MSR-4) repro 8.50

R-140 (HRO-5) repro 10.00

R-220/URR-29 \$12.00

R-274 repro 12.00

R-388 (51J3) repro 10.00

R-390 repro 15.00

R-390A repro 15.00

R-392 repro 15.00

SP-600-JX repro 10.00

T-195 8.50

TC3-12 repro 12.00

**U.S. ARMOR COMMUNICATIONS ELECTRONICS DATA** (book), July 1973; descriptions of mil-radio equipment, \$3.00

\*\*\*\*\*

**A USERS GUIDE TO ARC CORP RECEIVERS** -by M. Tauson; ARC-5, ARC-type 12 etc. \$4.

**NEW WEATHER SATELLITE HAND BOOK**, R.B. Taggart; \$8.95

**LOW & MEDIUM FREQUENCY SCRAPBOOK**, 4th Ed. \$9.95

**LIVING ON A SHOESTRING** by G. Ewing; "scrourging" \$8.

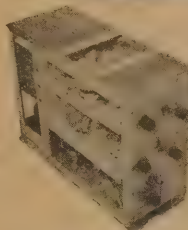


## 225-399.9 MHZ RECEIVER



R-278 RECEIVER, 225 to 399.9 Mhz AM; crystal frequency control for 1750 channels in 100 KHz steps; ten preset channels. Audio freq response: 200 Hz-20 KHz (wide), 200-5 KHz (narrow). Has AVC, squelch, and 44 tubes; unitized chassis, rackmount. 12 $\frac{1}{2}$ x19 $\frac{1}{2}$ x20, 115 lbs sh wt. Used, less guard channel, repairable, \$125. MANUAL, partial repro, \$15. Schematic, \$2.50

## POWER AMPLIFIER



POWER AMPLIFIER ASSEMBLY removed from 225-400 Mhz transmitter; makes an excellent foundation for your power amp. Has oscillator section with 12AT7, 1st doubler (12AT7), buffer (12AT7), 2nd doubler (4X150), and a push-pull tripler with two 4X150's. Manual controls for crystal select, RF driver w/lock, and PA tuning w/lock. PA-grid and plate currents could be monitored by adding a 200 microammeter and switch. Silver-plated chassis includes heavy duty blower and tubes 3/12AT7, and 3/4X150A (6 V fil.) 14x10x5, 33 lbs. #PA/TED w/schem, \$77.

## 2-32 MHZ SSB RECEIVER

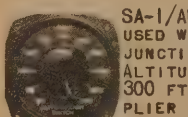


AN/FRR-59A TRIPLE CONVERSION SSB RECEIVER WITH FULL CARRIER SUPPRESSION FROM 2 to 32 MHZ IN FOUR BANDS: (2-4) (4-8), (8-16), and (16-32) MHZ. Receives LSB, USB, AM, CW, and MCW signals; LSB AND USB RECEPTION POSSIBLE SIMULTANEOUSLY OR SEPARATELY. INCREMENTAL OR CONTINUOUS DIGITAL TUNING IN 0.5 KHZ STEPS. INTERMEDIATE FREQUENCIES (IF): 1625-1725 KHz, 220 KHz, AND 80 KHz. BUILT-IN 1 MHZ CRYSTAL CALIBRATOR. AF LINE OUTPUT: 60 MW INTO 600 OHMS (MIN.); PHONE OUTPUT: 15 MW INTO 600 OHMS (MAX.). RECOMMENDED ANTENNA TERMINAL IMPEDANCE: 50 OHMS. USES 7- AND 9-PIN 6.3 V. glass tubes. Requires 105-125 VAC 50/60 Hz; 25 $\frac{1}{2}$ x22x24, 300 lbs sh. Connectors to make interconnect cables and partial repro of manual included. Used-not checked, \$250.00

## ALTIMETER TRANSCEIVER



RT-7/APN-1 ALTIMETER TRANSCEIVER, 418 to 462 MHZ FM; ABSOLUTE READINGS to 4000 FEET. CAN BE CONVERTED FOR OTHER USES. UNIT CONTAINS WOBBLATOR, DY-NAMOTOR, AND TUBES 2/955, 2/9004, 3/12SJ7, 4/12SH7, 2/12H6, AND 0D3. POWER REQUIRED: 27 VDC 3 AMPS. SIZE: 8 $\frac{1}{2}$ x18 $\frac{1}{2}$ x8; SH WT: 25 LBS UNUS, \$18.95; SHOCKMOUNT ASSEMBLY FOR APN-1, \$2.00



SA-1/ARN-1 ALTITUDE LIMITER SWITCH USED WITH RT-7 AND ID-14A IN CON-JUNCTION WITH AN AUTOPILOT SYSTEM. ALTITUDE LIMIT SET FROM 50 FT. TO 300 FT. IN 25' STEPS; X 10 MULTI-PLIER FOR HIGHER ALTITUDES. De-SIGNED TO SIGNAL WHEN MIN. AND MAX. LIMITS ARE EXCEEDED. 3" DIA. UNUS, \$2.95



OMNI-SPECTRA 11147B OSCILLATOR, impres-sive looking gold-plated miniature os-cillator; no techni-cal info available. We do know that OMni-Spectra specializes in small microwave coaxial components for frequencies above 1 Ghz. Solid-state; SMA fitting. 1x4 $\frac{1}{2}$ x3 \$40.

## 30-300 MHZ RECEIVER



R-1420/URR (OKI 905A) UHF RECEIVER, covers 30 to 300 Mhz AM, FM, CW in bands 30-90 and 60-300 Mhz; band-width selective 20 or 300 KHz. IF 21.4 Mhz; IF reject @ 30 Mhz is 54 db, above 50 Mhz is 80 db. Sensitivity: 1 uv/4 uv (AM) and 2 uv/6 uv (FM) for bandwidths 20 KHz/300 KHz @ modulated 1 KHz. Video output 5 vrms across 10K ohm load. Meters for Tuning and Signal, separate band tuning knobs and dials, EFO, RF/IF Gain, Audio Gain, Video Gain, Cor Sens, 600 ohm aui out. Partially transistorized; has 2/6CW4, 8058, 7587 muvistor tubes. Re-quires 115/230 VAC 50-400 Hz; partial repro manual from microfiche included. 3 $\frac{1}{2}$ x19x15, 25 lbs sh. Used-operational/not to specs \$495

R-1536/GLQ-3 RECEIVER, same as R-220/URR except has 115 VAC 400 Hz modular power supply; covers 20-237 Mhz AM, FM, CW in seven continu-ously tunable bands. 455 KHz IF; IF select-ivity 10-50-200 KHz. Calibration points every 5 Mhz. Antenna input impedance 95 ohms; no covers. 10 $\frac{1}{2}$ x19x14 $\frac{1}{2}$ , 100 lbs sh. Used, \$325.00

O-1351/GL RF OSCILLATOR, covers 1.5-350 Mhz in 8 bands; controls Int-CW-Ext Modulation, Antenna-Standby-Dummy Load, RF Gain, Adj for Max Output. Has Collins-type VFO, 8 filters, 8 changeover re-lays, 14 tubes plus transistors. Power re-quirements not known--no further info. May have been exciter for jamming transmitter. 7 $\frac{1}{2}$ x13 $\frac{1}{2}$ x18, 44 lbs sh. Used, \$150.00

LS-128A/F INTERCOM STA-TION, consists of a three tube audio amp in metal cabinet w/speaker, Idle-Listen-Talk switch, and switching for upto 24 remote stations. In-put-output impedance 50 or 500 ohms; speaker 45 ohms. Audio output: 2 $\frac{1}{2}$  watt. Includes terminal block on 5' cable and 6V6, 6X5, and 6SJ7 tubes. 13 $\frac{1}{2}$ x7 $\frac{1}{2}$ x7, 23 lbs sh. Used, \$18.95; unused \$27.95. Manual \$5/set.

TRANSISTORIZED GUARD RECEIVER f/ modified RT-178/ARC-27; one channel in 238-248 Mhz range. IF's 25.1/3.45 Mhz; has detector, noise limit-er, AVC, 4/2N1745 transis-tors, and 25.1 Mhz filter. 8x4 $\frac{1}{2}$ x4, 6 lbs sh. #5821-953-9695 used \$12.95

AM-777 AMPLIFIER DETECT-OR, p/o RT-128A/ARC-21 2-34 Mhz transceiver; IF's 1800/300 KHz. Slug tuned; w/tubes 4/5638, 3/5896 3/5899, 3/6021, 5840, 5902, and 5719. Schem-atic included. 13 $\frac{1}{2}$ x23 $\frac{1}{2}$ , 5 lbs. Used, \$10.00

## COLLINS 180L-3



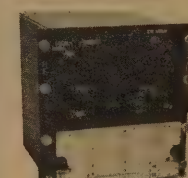
COLLINS 180L-3 AUTOMATIC ANTENNA COUPLER, usable with transceivers in the 2-25 Mhz range, 50-180 watts. Automatically resonates an antenna to a transceiver's frequency and couples the RF signal between the transceiver and antenna. Also trans- and antenna. Also transfers antenna to re-ceiver or receiver section after the trans-mitter is unkeyed. Coupler has 7-970 pf 3 KV vacuum variable capacitor and variable ribbon 32 uHY inductor; also smaller roller in-ductor and SWR meter circuit. Requires 28 V-DC 3 amps, 250 or 400 VDC 35 ma, and 115 VAC 400 Hz 20 VA. 10 $\frac{1}{2}$ x7 $\frac{1}{2}$ x11 $\frac{1}{2}$ , 24 lbs sh wt. Used, \$109.50; Manual, partial repro, \$10.

## RT-311 TRANSCEIVER



RT-311/ARC-38 AM TRANSCEIVER, 2.0 to 25 Mhz from 20 preset channels. Frequency interval: 500 Hz (2.0-7.25 Mhz) and 1000 Hz (7.25-25.0 Mhz). Has autotune from channel to channel. Minimum peak output 100 watts (2-14.25 Mhz), 90 watts (14.25-25 Mhz). Antenna tune power: 50 watts. 40 db carrier suppression. Receives AM or CW; sensitivity 5 uv for 6 db signal (phone). Selectivity: 7.5 KHz min @ 6 db, 20 KHz max @ 60 db or 1.8 KHz min @ 6 db, 5 KHz max @ 60 db when in CW sharp position. Unit has VFO and 25 tubes including three 6159's in power amp. Requires 28 VDC, 600 VDC, 250 VDC, -50 VDC, -65 VDC and 6.3 VAC. Also 115 VAC 400 Hz for selsyn on PA inductor. 15 $\frac{1}{2}$ x8x23 $\frac{1}{2}$ , 65 lbs sh. Used, not checked, \$85.00 MANUAL, partial repro, \$15. w/set purchase. COLLINS 618S-1 TRANSCEIVER, similar to RT-311/ARC-38 but without VFO. Crystal-control-led AM receiver, \$54.50. Schematic, \$3.00 618S-1/MC TRANSCEIVER, modified for SSB by RCA, xtal-controlled, \$99.95. Schematic, \$8.

RT-594/ARC-38A SINGLE SIDEBAND TRANSCEIVER, similar to RT-311/ARC-38 except has SSB capabilities. Used, not checked. \$145.00 RT-311/ARC-38 or RT-594/ARC-38A replacement modules removed from sets. Write your needs.



C-1398/ARC-38 CONTROL BOX for control and frequency selection of ARC-38. Twenty preset channels or manual in 500 Hz steps. With code book. Most functions opera-ble with ARC-38A SSB set except for function switch which would have to be dis-abled and provision for side band reception added. 7 $\frac{1}{2}$ x5 $\frac{1}{2}$ x6, 14 lbs. Used, \$14.95; Schematic, \$2 if bought w/Box. \*\*\*\*\* C-3428/ARC-38A CONTROL BOX, same as C-1398 except has SSB function switch for use with RT-594/ARC-38; used, \$19.95. Schematic, \$2.

## AIRCRAFT TRANSCEIVER

RT-524M AIRBORNE TRANSCEIVER mfg. by Aircraft Radio; covers 136.00 to 149.95 Mhz AM in 50 KHz crystal-controlled steps. 15 watts output. Has volume and squelch controls. Requires 24 VDC 6 amps. With tubes 8156, 2/8102, 6/6CW4, and 2/7587. Schematic not available. Size: 6 $\frac{1}{2}$ x3 $\frac{1}{2}$ x14; 10 lbs. sh. Used, no cover, \$54.95 \$40.

R-1134/WRR-3 VLF RECEIVER, 14-600 KHz AM-CW-FSK in five mechanical digitally tuned bands. 8 $\frac{1}{2}$ x17 $\frac{1}{2}$ x16 $\frac{1}{2}$  80 lbs. Repairable \$215. Chkd \$295.

R-482/URR-35 UHF RECEIVER, 225-400 Mhz AM-CW in one band. 8 $\frac{1}{2}$ x17 $\frac{1}{2}$ x19, 65 lbs. Repairabl \$95.

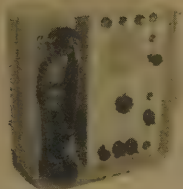
BC-AS-229 RECEIVER, 201 to 398 KHz and 2500 to 7850 KHz using plug-in coil sets. Uses tubes 37, 38, & 4/39's. Requires 230 VDC 80 ma and 12 V. 8x7x16, 15 lbs sh wt. Used, less tubes & coils \$8. With tubes/no coils, \$16.95 PLUG \$2. TUNING KNOB, \$2. MANUAL, partial repro, \$8.50



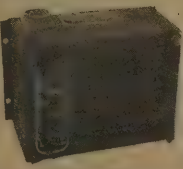
AM-1955/GRC AMPLIFIER CONVERTER USED WITH R-1148/GRC-55 RECEIVER FOR 600-1000 MHZ BAND. 17 MHZ IF. Has 115 V 60 HZ MOTOR AS PART OF AFC SYSTEM. WITH TUBES 2C40A, 2/5842, 5654, 1N218, 1N21WE. 150 VDC AND 6.3 VAC REQUIRED. SIZE: 15x9 $\frac{1}{2}$ x8; 30 LBS. SH. USED, \$59.00 \$38.



## CANADIAN REMOTE STATION



CANADIAN CHANNEL CONTROL BOX, originally used as a four channel remote unit for a transmitter; looks like it might be adaptable as part of an intercom system. Has push-to-talk handset, 3 1/2" 600 ohm PM speaker, audio transformers 600 ohm to 8 ohm and 50 ohm to 600 ohm CT, volume control, channel selector (2-deck, 6-pole 4-position each), phone and key jacks, two pilot lights, and other parts. Heavy aluminum cast case. 15 1/2 x 13 1/2 x 6 1/2, 34 lbs. #CAN-40-RC unused \$22.95



TCS SPEAKER-CONTROL UNIT, has 5" dia permanent magnet 6 ohm speaker, 500 to 6 ohm audio transformer, volume control, headphone and mic jacks, and three toggle switches. 5 1/2 x 7 1/2 x 13 1/2, 8 lbs. #TCS-23270, \$12.95

## CLASS C POWER AMP

CLASS C POWER AMPLIFIER removed from T-195/ERC 100 watt transmitter; uses 4X150D tube to cover 1.5 to 20 Mhz in ten bands using variable and fixed capacitors, switches, and 400 Hz servo motor. Chassis also has discriminator and servo amplifier. Requires +1000 VDC modulated, +250 VDC, -45 VDC, and 115 VAC 400 Hz for motor. Includes tubes 4X150D, 5751, 6AQ5, 5763 and schematic info. 9 1/2 x 8 1/2 x 6, 15 lbs sh. #PA/T195 used \$45.



## VFO - EXCITER - MOD

VFO-MASTER OSCILLATOR FROM THE T-195 TRANSMITTER; GENERATES FREQUENCY OF 1.5 TO 3 MHZ. HAS 5749 OSCILLATOR TUBE AND 5749 BUFFER-AMP TUBE. WITH 2 1/2 x 3 1/2 x 16" DIA. SHAFT. 2 1/2 x 3 1/2 x 7, WT: 5 LBS. VFO/T-195, REMOVED F/EQUIPMENT,



\$7.95

EXCITER STAGE FROM T-195, USED TO AMPLIFY VFO OUTPUT AND SUPPLY DESIRED TRANSMITTING FREQUENCY TO POWER AMP. SLUG TUNED IN RANGES (1.5-3), (3-6), (6-12), AND (12-20) MHZ. WITH TUBES 6AU6, 2/6AK6, AND 5763. SIZE: 4 1/2 x 3 1/2 x 8, 12 LBS. EXC/T-195,



\$14.95

MODULATOR F/T-195, DESIGNED TO PROVIDE PROPER AUDIO POWER TO MODULATE POWER AMP AND SUPPLY SIDETONE. 300 HZ AND 3500 HZ BANDPASS. W/TUBES 5726, 2/12AT7, 5814. LESS 4X150 TUBES AND SOCKETS. 8 1/2 x 6 x 4 1/2, 6 LBS. \$10.95



## TRANSISTOR RADIOSONDE

TRANSISTORIZED RADIOSONDE WITH CLOCKWORK TIMING MECHANISM (NO KEY); USED IN METEOROLOGICAL OBSERVATION OR SIMILAR APPLICATIONS REQUIRING AN EXTREMELY LIGHT-WEIGHT TRANSMITTER. UTILIZES A 2-TRANSISTOR MODULATOR AND A 2-TRANSISTOR INTERMITTENT CIRCUIT. TRANSMITTER HAS A 7533 INTEGRAL CAVITY TUBE WHICH FUNCTIONS AS THE TUNED CIRCUIT FOR THE OUTPUT: 1660-1700 MHZ, 575 MW (NO FURTHER DATA). WITH HUMIDITY ELEMENT. TRANSMITTER SIZE: 2 1/2" DIA. X 6"; OVERALL SIZE: 7 1/2 x 4 x 5 1/2. SHPG. WT: 4 LBS. FRIEZ #3002, UNUSED, \$9.95



AN/AMT-4A RADIOSONDE, consist of T-504A xmitter and MD-147C modulator; unit is similar to Friez 3002 except uses tubes 5794 and 5875 and operates at 1680 Mhz. Requires 1.5, 6, & 15 VDC. 2 lbs sh wt. #T-304A transmitter only, \$4.95; 2/38. MD-147C modulator only less humidity and pressure elements, \$3.00; 2/35. T-69F/AMT-2 RADIOSONDE XMITTER only, 390-410 Mhz; 5703, 5910 tubes--\$2. BE208 battery, \$2.

## TELEVISION 'TUNE-UP'



HEATH VHF TUNER & IF SECTION, transistorized mechanical detent tuner with fine tuning; transistor IF section. Probably used in most Heath mid-1970's color televisions. Fix-up that old TV. Factory assembled; no schematic. #100-1071 unused \$12.

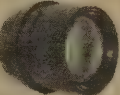
## MX-329 GYRO ASSY

MX-329/ASG-10 BOMB DIRECTOR GYRO set in MT-338 shock-mount. Gyro is operated from external air pressure and has 27 VDC gear motor to look gyro. Aluminum housing 4-3/8" dia; gyro about 2 1/2" dia. Has glass window on one end with -20 to 0 to +60 scale for monitoring relative attitude. 6 1/2 x 7 x 9, 10 lbs sh. \$29.50



## ZEISS 300 MM LENS

CARL ZEISS 3-TESSAR multi-element color-corrected COPY LENS; 300 mm focal length and fixed aperture of F5.6. Front lens unscrews and is usable as separate 127 mm lens; 62 mm dia. Outer metal ring 3-5/8" dia; rear barrel 3" dia x 1-5/8" L. O/a 3-1/8" long. 3 lbs sh. #300MM-ZSL, NEW, \$16.95



180 MM LENSE with aperture adjust able in stops f4.5, f5.6, f6.3, f8, f16; might make nice enlarger lens for 4x5 format. 2-5/8 x 2 1/2" dia; 2 lbs. #AST-L180 used \$10.95

## VASCAR II SPEED TRAP



VASCAR II DISTANCE/TIME COMPUTER-INDICATOR, originally used by police agencies for clocking speed of vehicles while the police car was either in motion or stopped. Unknown vehicle is determined by referencing it to the known speed of the police car over a predetermined distance. Clocking possible of vehicle in front of, behind, in opposite direction of, or across the path of the police car. Displays average speed in tenths of miles per hour up to 199.9 mph. Computer module consists of four circuit boards with 5 VDC logic and transistors. Operates from 12 VDC 3.4 amps. Includes computer module, control module w/cable and plug, power plug, transducer plug, and manuals. Speedometer transducer is not available. 2 1/2 x 13 1/2 x 7 1/2, 18 lbs sh. Used, operational-not calibrated \$60.

VASCAR II  
DISTANCE/  
TIME COM-  
PUTER-IN-  
DICATOR, origi-

ANTENNA TUNING ASSEMBLY with two 20-400 pf 0.02" air gap variable capacitors. Each rotates 180 in 10 sec using 24 V 60 Hz and 4 mf 330 VAC capacitor (not included); can be adapted to differential use. 360 rotation actuates fixed capacitance in parallel over next 270 in 13 steps. 400 Hz servo motor runs on 24 V 60 Hz; intermittent 115 V 60 Hz required to engage fixed capacitance steps. W/schematic; 4 1/2 x 6 1/2 x 2 1/2, 5 lbs sh. #2-C1003/T-195, used, \$8.95



GRAB BOX ASSORTMENT OF USED AND UNUSED MANUFACTURERS AND GOVERNMENT SURPLUS ELECTRONIC PARTS SUCH AS ASSEMBLIES, MOTORS, COILS, TRANSFORMERS, CHOKES, CIRCUIT BOARDS, CAPACITORS, RESISTORS, AND OTHER USABLE ITEMS. PACKED IN 50 LBS. CARTONS. \$7.50 EA. OR TWO CARTONS FOR \$13.00.

SHIPPED VIA UPS WITH FREIGHT CHARGES VARYING FROM \$5 TO \$16 PER CARTON. ALLOW FOR FREIGHT. GRAB BOX IS GOOD FILLER TO TAKE ADVANTAGE OF MOTOR FREIGHT 150 LBS. MINIMUM WEIGHT RATES.

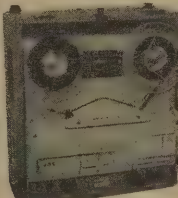
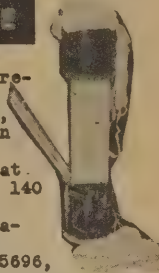
## COMPRESSOR-VACUUM PUMP



COMPRESSOR/VACUUM PUMP UNIT, originally used with medical equipment. Could be used as-is or dismantled for separate components. Consists of Cast #1531-V-175-351 motor rated 115 VAC 60 Hz 1.7 amps, 1/10 HP 3450 RPM. Compressor duty: 1.5 CFM @ zero PSIG to 0.95 CFM 20 PSIG max. Vacuum duty: 1.5 CFM @ 0" HG, 0.8 CFM @ 10" HG, or 0.2 CFM @ 20" HG. Compressor outlet connected to four valve assembly; each valve has 1/2" orifice and rated 5 PSIG. Printed circuit board cycles valves 15 seconds on/15 sec off, two valves or all four valves functioning according to position of valve selector switch. Compressor fittings standard 1/8" NPT. Includes 4-blade cooling fan and sound insulating enclosure for low noise operation. 10 x 13 1/2 x 18 1/2, 34 lbs sh. #A3-LAP-VP, used, \$34.95

## AMT-6 RADIOSONDE

AN/AMT-6C RADIOSONDE WEATHER ANALYSIS SET, designed to be released from high-flying aircraft to transmit temperature, humidity, and pressure data on its descent. Transmits pulse signals in 399-403 Mhz range at repetition rate of 20-550 Hz, 140 watts peak. Includes 15" dia drogue and 48" dia vented parachutes, humidity-temperature-pressure elements, and tubes 5696, 5875, 6026. Requires 1.5, 6, 135 VDC. Looks like an interesting experimenter's item. 5 1/2" dia X 2 1/2"H, 9 lbs sh. Unused, \$14.95



## WEBCOR RECORDER

WEBCOR TAPE RECORDER, plays and records @ 3 1/2 or 7 1/2 ips; accepts up to 7" dia reels. Has standard features fast forward/rewind plus edit lever, footage counter, and 20-0-20 record level indicator. Also mic, bridge, and external speaker jacks, and built-in speaker. Monaural use only; 100-10000 Hz response @ 7 1/2 ips. Mic input impedance: 500K ohms. With tubes 12AU7, 12AX7, 6X4, 6BQ5, 6HU6, & 7025. Requires 115 VAC 60 Hz. 13 1/2 x 12 1/2 x 7; 32 lbs sh. Units checked for basic playback/record; may need further adjustments. Mic and reels not

## ANTI-JAMMING TRAINERS

AN/ULT-T2 (15X12) X-BAND INTERFERENCE TRAINER, a low power transmitter in the 8500-9600 Mhz range designed to train radar operators in anti-jamming techniques. Unit can be manually tuned and modulated by a sine or square wave, pulse, noise, or modulation from an external source. Has controls for CW, 5-16 Mhz/sec sweep, 250-500 -1100 Mhz sweep sector, percent modulation, and pulse width 1-5 usec. Frequency modulation 15 Hz-15 KHz variable and fixed 50 or 100 KHz. Audio output impedance 600 ohms. Designed to be used within 50 feet of radar. Uses 2K45 klystron. Requires 115 VAC 50-400 Hz; with antenna horn and transit case. 13 1/2 x 19 1/2 x 19 1/2, 110 lbs sh wt. Used, \$99.50 \$80.



AN/ULT-T4 (15X18) INTERFERENCE TRAINER, similar to ULT-T2 except covers L-Band (1220-1350 Mhz) and uses 2C36 klystron. With antenna horn and transit case. 17 1/2 x 23 1/2 x 18 1/2, 100 lbs sh. Used, \$125.00 \$85.

MANUALS for ULT-T2 or ULT-T4, \$10 each w/set.



## Control Boxes

## Filters

## Indicators

## Tuning Units

## Amplifiers

ALARM BELL  
OPERATES FROM  
24 VOLT D.C.  
SIZE: 4x4x2 1/2  
WT: 1LB #561-3  
NEW \$1.95

## ARC-5 BOXES

BC-1361 SWITCH BOX  
w/bullseye light,  
2 water-proof conn  
4PST switch, SPST  
mom. sw., and two  
binding posts.  
6x5x2 1/2, 2 lb. \$3.

RF CHASSIS f/  
Bendix RA-18C  
108-138 Mhz  
receiver; 7-  
gang capacitor  
tunes ant-coil  
RF grid, RF

plate, mixer grid, 1st osc-  
quadrupler, 1st osc-amp, &  
cathode follower input.  
Tubes 2/5654, 5670, 5725;  
requires 6.3-12.6-108-250  
VDC. 3x3x1 1/2, 5 lbs. W/  
schem. #RF100-RA18 NEW \$10.

C-87/ART-13 PILOT  
CONTROL f/ART-13  
transceiver; has  
two 1 1/2" dia cera-  
mic rotary switch  
(one 1-deck 12-  
position; other  
2-deck 5 pole 3-pos), mic  
jack, pilot light, and 2  
knobs. 3x3x3, 2 lb. \$4.00  
C-87 w/o switches, knob \$1

SA-3 IMPACT SWITCH  
SPST, 10 A. NORM.  
OPEN, USED IN AIR-  
CRAFT TO TURN ON  
DETONATOR CIRCUIT  
WHEN CRASH OCCURS  
10 "G" OF FORCE.  
HORIZONTAL PLANE. \$1.95 EA.

LS-230 INTERCOMM-  
UNICATION STATION-  
UNION CONTROL BX  
CONTAINS 3 ROT-  
ARY 3 POSITION  
LEVER CONT. SW  
1 LEVER SW. DP  
DT CENTER OFF,  
1 LEVER SW. SPST 1 SIDE,  
OTHERSIDE SPST MOM. & CENTE  
OFF. 3 LITE IND. PHONE &  
MIKE JACK & 1 MIN. TRANSFER  
50 TO 500 OHM. SIZE: 7x5x2 1/2;  
WT: 3 LBS. PRICE: \$5.95

## DELAY LINES

DELAY LINE ASSEMBLY with  
three ESC 71-26-1 continu-  
ously variable DL's, each  
with 0.5 usec delay, 750  
impedance, and screwdriver  
adjust control. Also five  
BNC connections. 10x2x2 1/2,  
3 lbs. #5915-650-3805 \$12.95

## PRISM

PRISM from M4A1 tank peri-  
scope. 5x1 1/2 view area.  
Peak around corners or use  
to direct light. O/A 6x2x2  
x2, 2 lbs. Used \$2.75 2/\$5.

RIGHT ANGLE  
DRIVE vernier  
control, 1 1/2"  
dia. dial, w/  
lock & coup-  
ling f/1/4" shf  
3-hole mtg. #TU-10RA, \$2.

BC-450 RECEIVER CONTROL f/  
tuning upto 3 receivers.  
W/dials 190-550 KHz, 3-6  
Mhz, & 6-9.1 Mhz; CW-off  
-MCW switches, volume con-  
trols, and phone jacks.  
9x5x3, 3 lbs. Unused \$8.

BC-451 TRANSMITTER CONTROL,  
for one to four Command  
mitters; built-in key,  
mode, mic jack. Unused \$5.

RF TUNER  
from R-19/  
ARC 118-148  
Mhz recei-  
ver. Consists  
of 4-gang capaci-  
tor with geared  
drive for MC-215 spline,  
BNC RF connection, and  
tubes 3/9003 and 1/9002.  
Silver-plated chassis. 4x3  
x3, 3 lbs. Unused.  
ARC #15176 \$12.95

MAR CONTROL BOX,  
contains 3-SPST  
switches, two  
phone & mic jacks  
(all waterproof)  
and one dual pot w/dial  
knob. 5 1/2x5 1/2x3, 3 lbs sh.  
#CMX-23429, unused, \$2.00

\*\*\*\*\*  
-DOLLAR DAZE- CONTROL  
BOX w/DPDT, DPST, &  
SPST switches and 3  
pilot lights w/bulbs. \$1.

C-868/ARC-27  
CHANNEL SEL-  
ECTOR for  
ARC-27 trans-  
ceiver; sel-  
ects 18 channels plus  
guard channel. Also volume,  
function sw, 2 pilot lights  
6x3x3 1/2, 3 lbs. Used, \$9.00  
19-pin conn f/C-868, \$3.00

MAGNET  
7" long, 3"  
high, 2 1/2" wd.  
6-3/4 lbs.  
#SK-MAG  
have good power. \$2. \$7.50

SB-329/AR  
SIGNAL DIS-  
TRIBUTION  
BOX, p/o  
ARC-44-45  
sets; has 4-position selector,  
vol-control, 2 pilot  
lights w/327 lamps, and 5  
mini-toggle switches (4/SP-  
DT, 1/DPDT). 2 1/2x5 1/2x4 1/2, 4  
lbs sh. Unused, \$7.95  
SA-474/AR SWITCH BOX has  
mini-toggles 4/DPDT, 1/DPST  
and 2 pilot lights w/327  
lamps. 2 1/2x5 1/2x2 1/2. Unused \$6.

SB-328/AR CHAN-  
NEL SELECTOR  
for ARC-45;  
12-pos chan-  
nel select,  
tone, volume, 2-pilot light  
w/327 lamps. 2 1/2x5 1/2x4 1/2, 2  
lbs. Unused \$10. Used \$6.  
SB-327 CHANNEL SELECTOR  
for ARC-44 R-T, used \$15.

-A REAL BONANZA-  
HAS MANY ITEMS  
YOU CAN USE: 1 1/2"  
"tune to max"  
300 ua meter;  
4-band bandswitc  
& dial assy; 5-  
position rotary  
sw with 1-pos mo-  
mentary; spin  
crank for tuning with 10-  
turn pot; volume control  
w/3-gangs; five 327 lamps;  
Loop switch (L or R momen-  
tary); SPST toggle sw; oth-  
er parts. Originally tuned  
R101/ARN-6 (p 4). May have  
broken wafer switch; 6 lbs.  
#C423/ARN-6 used \$4; 2/\$7.

ADJUSTO  
PROFILE  
TEMPLATE  
From the  
good old  
days.  
A quality  
profile gauge with cast  
frame, 6" brass strips  
that allow very fine reso-  
lution of profile from .007  
thick by .07 inch wide.  
Used in woodworking, metal  
or wherever exact contour  
shapes are needed. Shpg 3lb  
Order--Adjusto Template \$10

\*\*\*\*\*  
MAKE \*  
MACY'S \*  
PHONE \*  
PATCH \*  
\*\*\*\*\*  
transformer,  
mic & phone jacks. Source  
for Phone Patch project.  
7 1/2x3 1/2x5, 5 lbs. Used, \$4.

CRV-23253 TUNING  
CONTROL, p/o early  
WW-2 ARB set; four  
ranges covering  
190 KHz-9.1 Mhz.  
Fits MC-124 spline  
2 lbs sh. Unused \$6.

EARLY WW-2  
PILOTS CON-  
TROL BOX  
#RL-240,  
dual inter-  
com control, volume, 2/FL68  
plugs. 9x5x3 1/2, 4 lbs. \$7.95

BA-398/  
PRC-25  
ARCTIC  
BATTERY  
PACK,  
consists of 72/1.5 VDC mer-  
cury cells wired to pro-  
duce 2.5 V 400 ma and 12  
to 15 VDC 1.4 A in cloth  
bag. 1977 date codes; un-  
used but LV output weak.  
6 lbs sh. \$4.95 ea 2/\$8.  
\*\*\*\*\*  
NICAD BATTERY, recharge-  
able 4.8 VDC 500 ma; 1 1/2x1-  
3/8". #4/500DKZ, NEW, \$4.

SAFARI HAT  
Nice for jun-  
gle or life-  
guard use or  
upside down  
as flower pot.  
Dusty w/worn  
spots in khaki  
cloth; 11x14" L  
2 lbs. #SAF-HAT, \$2.; 2/\$3.

RUBBER  
SHOCK  
MOUNTING  
4 lbs #4 \$.45  
6 " #6 .50  
10 " #10 .60  
12 " #12 .65  
16 " #16 .75  
24 " #24 1.00  
35 " #35 1.25  
OTHER WEIGHTS AVAILABLE.

## M-389 ADAPTER

M-389 ALIGN-  
MENT ADAPTER  
for BC-659  
transceiver;  
allows the  
changing of  
crystals as well as the  
alignment of the set with-  
out the use of an external  
meter. Mounts inside the  
BC-659. 2 lbs. \$5.00  
M-394 ADAPTER f/BC-620, \$5.

VO-6 OSCILLATOR  
CRYSTAL CONTROL  
4.3 Mhz; VARIA-  
BLE 0-100 U-V  
OUTPUT. USED  
WITH VARIOUS  
SETS HAVING 4.3  
Mhz IF. W/IT4  
TUBE. REQUIRES 1.5 AND 67.5  
VDC. 5x5x3 1/2, 5 LBS. USED \$8

I-210 ALIGNMENT  
INDICATOR USED  
WITH VO-6. HAS  
6E5 EYE TUBE FOR INDICATION  
ALSO CHECKS RESISTANCE TO  
50K OHMS AND 0-4.5-6-30 V.  
REQUIRES 4.5 OR 7.5 VDC AND  
60, 90, OR 150 VDC.  
5 1/2x4 1/2x2; 3 LBS. SH. USED \$9

ME-40 MANUAL f/above, \$5.

SWITCH ASSY.  
FUEL LEVEL  
CONTROL.  
24 vdc 3 amp.  
7" cylinder, 2 1/2" dia.  
United Controls N7-1-16 \$7.

MALLORY  
SONALERT

4 to 28 VDC, 2900 Hz cont.,  
64-78 db. Snap-look fit in-  
to 1.063" dia hole; 1x1-5/8"  
dia. #SNP-428, NEW, \$4.95

MALLORY INTRUSION  
ALARM, hang on door  
knob and set sensi-  
tivity. Sonalert  
sounds when outside  
door touched. Will  
not work on steel  
doors; 9 VDC requir  
#DRS-DC, NEW, \$7.95

## RECHARGEABLE

GLOBE 6 VDC 12  
AMP HR recharge-  
able gel-cell;  
slip terminals,  
sealed plastic  
case. 5 1/2x4 1/2x2 1/2  
6 lbs sh. NEW  
#GC6120 \$16.95  
2 for \$30.  
ELPOWER 12 VDC 4.0 AMP HR  
gel cell; sealed plastic  
case. 5x3 1/2x5/8, 5 lbs sh.  
#EPL240 NEW \$14.95 2/\$26.

GATES LEAD-  
ACID BATTERY  
PACK, six 2  
VDC 5 amp  
cells wired  
to produce  
12 VDC 5 A;  
rechargeable.  
Each cell 3 1/2" dia, 7 lbs.  
#0800-0041, \$16. 2/\$28.00  
GATES 12 V 2.5 AH LEAD ACID  
8x2 1/2x1 1/2. #0810-0016 used \$8

NICAD SUB-"C" CELLS, 2.5 V  
800 ma per pair; each 1-1/8  
x1" dia. #NC-SC-PR \$2.50/pr  
BB-648 NICAD, 1.2 V 18 AH @  
1 hr rate; 5x3x1-8x1-5/8,  
3 lbs. Used-take charge, \$3

## NOISE-VOICE

ACTIVATED  
TRIGGERING  
DEVICE

VOLTAGE THE RE-  
LAY CAN BE ACTI-  
VATED BY NOISE  
OR VOICE. UNIT CONSISTS OF  
CRYSTAL MIC. TRANSISTOR, SCR  
2 CAP. 3 RES. AND A TRIMMER  
POT. FOR ADJUSTING SENSITI-  
VITY. W/SCHEMATIC/LESS BATT  
AND RELAY. SIZE: 1 1/2x1; 2 oz.  
LEE#5355, \$1.00 EACH.

SODECO 6-DI-  
GIT COUNTER  
electrically  
resettable;  
60 impulse/sec count coil  
and reset coil both 24 V  
DC 83 ohms. 1-7/8x1 1/2x1 1/2  
x4 1/2; #RG266, NEW, \$8.95

## KEYBOARD

CALCULATOR  
KEYBOARD,  
17 BUSINESS-  
SIZE KEYS.  
EACH SWITCH  
REMOVEABLE;  
CONTACTS AC-  
CESSIBLE. SP4P SLIDE SWITCH  
USED, EXC. NCR#0092, \$3.95

## KEYBOARD

16 KEY KEYBOARD  
BY MICRO SWITCH  
CONTACTS RATED  
12V 6MA TO SING-  
LE COMMON BUS.  
BUTTONS .5x.5x.2. 0 THRU 9  
RESET, DELETE, CARD NO.,  
\$ AMT, PROCESS, FCT. SIZE  
3x3x1 #16NW3-44 NEW \$4.95

## UNIPULSER

DURANT UNI-  
PULSER II  
COUNTER, e-  
lectromech-  
anical type  
requires 24  
VDC pulse;  
36 Vrms half  
wave AC for reset. Has aux-  
iliary low current con-  
tacts for remote indication  
or control. 1 1/2x4 1/2x4 1/2 per  
counter. Unused w/PCB sock-  
ets. Bank of three, \$6.00  
" " four, \$8.00

## VIBRATORS

VIBRATORS removed f/equip.  
VB-1 & -7: 6 V. for PP-308,  
PE-97, -117, -237. \$3.95  
VB-12 (6 V.) or VB-13 (12V)  
for PE-120. \$2.95  
3H6990-16, f/PP-112, \$2.95  
Vibrators VS-3, C534, VB-8,  
VB-9 as available, \$2 ea.

BB-51 BAT-  
TERY 6 V.  
2.75 hours  
thru 30A  
lead cells.  
Dry charge.  
1 1/2x3 1/2x7/8,  
3 oz. \$1.50

BB-52, same  
as BB-51 except 36 V. 3 A.  
thru 1200 ohms. \$1.00 ea.  
BB-208 BATTERY PACK, con-  
tains BB-51, 3/BB-52, \$3.



## PUSH-TO-TEST

PUSH TO TEST INDICATORS WITH MARKINGS ALSO HAVE CLEAR & AMBER LENSES

KORRY MFG., ALL UNUSED.

KORRY 260 PUSH-TO-TEST INDICATORS, DOUBLE LAMPHOLDER WITH MINIATURE BAYONET BASES. 1 1/2" x 1 1/2" x 2 1/2" D. NEW. CHOOSE FROM THESE LENS INSCRIPTIONS:

PHASE B POWER, 28 VDC. OR 24 VOLTS DC. \$1 EA. 3/\$2

KORRY 260 indicators with rocket launch-related inscriptions: UNLOCK, TESTING, COMPONENTS TEST POWER ON, HEATER 1-2-3, CENTER, IN OVERFLOW, IN LOWER LEVEL, IN UPPER LEVEL, 100% LIQ OXY, LIQ OXYGEN FINE, FUEL TANK PRESSURIZED, COOLANT FILL, 40 C THERMO-STAT, LOX THROT VALVE HEATER. Price: 75¢ ea or 4 for \$2.

ASSORTMENT OF ROCKET LAUNCH INDICATORS, NO CHOICE, 6/\$2

KORRY 136 PUSH-TO-TEST INDICATORS, SINGLE LAMPHOLDER WITH MINIATURE BAYONET BASE 1 1/2" x 1 1/2" x 2 1/2" D. INSCRIPTIONS: STANDBY; LOW; MALF. 65¢ 2/\$1.

KORRY 103 INDICATOR, PUSH-ON RED PLASTIC CAP; PLASTIC BODY. 5/8" SINGLE LAMP MOUNT. \$51¢, 50¢ EA. 3/\$1.

LAMP HOLDERS FOR 327 LAMPS 1/2" HOLE MTG. FLAT TOP LENSE 3/8" DEEP.

WHITE LENS NUMBERED 1 TO 9, YELLOW ("MAX"), RED, AMBER, AND GREEN. SPECIFY. #6210-617-0934, 39¢ EA.

#327 LAMP FOR ABOVE, 39¢ NEON CYLINDRICAL TYPE LITE

ELDEMA V W/RES. 3/8x1 1/2" 2685 28v .04A 1/4x7/8

OBlong SLIP IN TYPE NEON 1/2x1-3/8" 125v. #3100 USED ALL ABOVE 3 FOR \$1.00

## MINIATURE LAMPS

STK #	TYPE	V.	A.	BASE	BULB	EA	Per 10
#14	flashlight	2.47	.3	cand sc	G-3 1/2	.30	\$2.00
#362		14	.08	min flanged	T-1 1/2	.35	2.50
#327	grain of wheat	28	v.0.04	a	T-1 1/2	.39	3.00
#12V-25W	Standard lightbulb for 12 VDC	25	watts	1/2		\$1.25	
#511		2	.25	min sc	G-6	.20	1.00
1004	auto type	12	.94	DC bay	B-6	.25	1.50
NE-48/991	neon	115	.25	DC bay	T-4 1/2	1.50	12.00
NE-51	neon	115	.25	min bay	T-3 1/2	.40	3.00
225882		18	.11	can sc	T-3 1/2	.20	1.00
#47		6.3	.15	min bay	T-3 1/2	.25	1.50
#24-68M		24	.68	DC bay	B-6	.25	1.50

MARINE TYPE 600 WATT 28 VOLT GE Q600 PAR 56/1 SCREW TERMINALS PRICE: \$6.00 EA. WRITE FOR 100 LOT PRICE.

GRIMES LAMP ASSY. #4725-24 WITH 327 GRAIN/WHEAT BULB. 6220-333-5827 59¢ EA. 2 FOR \$1



SUB-MINIATURE NEON PILOT LIGHT ASSEMBLY. FLUTED 5/16" DIA. CLEAR JEWEL. BASE IS FEMALE PART FOR A THREE PRONG PLUG WITH 1/16" DIA. HOLES IN ISOSCELES TRIANGLE PATTERN. MOUNTS IN 3/8" HOLE. 0" TO 3/8" SURFACE CLEARANCE. 1 3/8" LONG. INCLUDES BULB. USED. 110V. PIL007 \$.25 5/\$1.00

SINGLE TERMINAL AND CONTACT SUB-MINIATURE DIMMER PILOT LIGHT. MECHANICAL DIMMER VARIES SIZE TO COMPLETE DARKNESS. REQUEST T-1 1/2 BULB. 5/16" DIA. SMOOTH RED JEWEL. MOUNTS IN 7/16" HOLE. 1 3/8" LONG. LESS BULB. NEW. 6210-643-4087 \$.59

PILOT LIGHT WITH SINGLE CONTACT, MINIATURE BAYONET BASE. CLEAR STOVEPIPE, SMOOTH 5/8" DIA. JEWEL. MOUNTS IN 1 1/16" HOLE. SURFACE CLEARANCE IS 0" TO 3/8 2 1/8" LONG. LESS BULB. USED. PIL008 \$.39

PILOT LIGHT WITH SINGLE CONTACT, MINIATURE BAYONET BASE. 1/2" DIA. SMOOTH. GREEN JEWEL. MOUNTS IN 5/8" HOLE WITH A SURFACE CLEARANCE OF 0" TO 1/2". 2 1/16" LONG. LESS BULB. UNUSED. PIL004 .49

PILOT LIGHT JEWELS, 1/2" dia for 1/2" dia threaded assy. Asst colors. Series-F 6/\$1

WHITE SWITCHBOARD JEWELS, 3/8" dia. #4C1971, 10/\$1.

## 500 KHZ FILTER



COLLINS 500 KHZ FILTER ASSEMBLY consisting of nine adjustable coils and associated capacitors on 2x1x6 enclosed chassis. Uses MB style miniature connector. Units are checked, but may need alignment. Collins part #542-4777-004, \$5.00 Above, need repair, 2/\$4.00

## INDUCTORS

FERRITE POT CORE INDUCTORS, PC mount; 7/8x2 1/2" dia. NEW. 123-177 mH, #NV245, \$1.50 600 mH, #404-3-2, \$1.50 TORROIDAL COILS, 5/16x1 dia 150 mH, #403-1-1, 85¢ ea.

TELEPHONE PICK UP COIL used in modem data coupler; no specs. 5/8x1 1/2 dia #403-4 \$1

COMMAND XMITTER ANTENNA COIL for 5.3-9.1 Mhz range; 24 turns wire around 2" dia X 3" ceramic form; No contacts or mount brackets. #6035 \$6.

#6035-MB, as above but with mount brackets \$7.50

NATIONAL NC-100 ASC CW OSC tuning coil, 456 KHz. \$3.

BC-348Q RECEIVER IF COILS 1st IF 9A1952 \$147 \$3.00 2nd IF 9A1953 \$148 \$3.00

BUD TRANSMITTING PLUG-IN COILS on 5-pin ceramic base #3C804 40 meters \$1.50

## COLLINS FILTER

COLLINS MECHANICAL FILTERS Used, repairable @ \$3 each:

#526-9311-00 F300-Z5 #526-9312-00 F300-Z4

Used-repairable, \$8.00: #526-9310-00 F455-Q3

#526-8088-00, 21.608 Mhz (5895-980-9828) NEW \$20

#526-9369-00, F64-Z7; (5915-724-6633) NEW \$22



COLLINS CHANNEL MODEM CIRCUIT BOARDS each with two 6"x1" dia mechanical filters plus other parts such as transformers, chokes, pots, etc. 9x6, 2 lb-Used: #522-5247 w/two F64-Z8A (526-5249) filters, \$6.95 #522-5243 w/two F100-Z8B (526-9463) filters, \$7.50

## FLUTED KNOBS

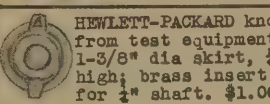


TGS SPIN KNOB & CRANK, 1-5/8" dia fluted knob w/ 7/8" crank extension; 2" high handle. \$1.50

LUXITROL KNOB, 2-3/8" dia. w/pointer; fits 3/8" dia. shaft, \$1.50

#SE-SC15 2 1/2" dia SPIN KNOB w/2 1/2" metal spin handle; brass insert f/1/4" shaft \$3.

7 1/2" dia. WHEEL-TYPE CONTROL, fits 3/4" dia. shaft. 2 lbs. W/pointer \$4.95 Without, \$3.95



HEWLETT-PACKARD knob from test equipment, 1-3/8" dia skirt, 1/2" high; brass insert for 1/2" shaft. \$1.00

1-5/8" DIA. FLUTED KNOB W/2" SKIRT; FITS 1/2" SHAFT. URC# S-649, \$1.25 NEW

1-1/8" dia X 1-1/8" H knob with provision for attaching skirt; brass insert for 1/2" shaft. #KNB030 \$.50

MODERN GREY KNOB w/fine-ribbed side. 1 1/2" dia X 9/16" H. F/1/2" dia sh. #7577 NEW \$1.

1 1/2" dia fluted knob with 2" dia skirt; brass insert f/1/2" shft. #0728 NEW \$1.00

1" DIA. FLUTED KNOB WITH BRASS INSERT FOR 1/2" SHAFT. KNBN008 \$.25

ALL THE ABOVE KNOBS ARE OF SET SCREW TYPE.

## SPIN KNOBS

2" DIA. METAL FLUTED SPIN KNOB FOR 5/32" SHAFT. KNBN009 \$.79

2 1/2" DIA. SPIN KNOB. METAL. TAKES 3/16" SHAFT. #8089 NEW \$2.00

MAKE ANY FLAT KNOB A SPIN 1 1/2" ADAPTER WITH 3 HOLES, TO FASTEN TO YOUR KNOB, WITH SPIN GRIPPER #225816-3 \$1.00

1-5/8" DIA. METAL SPIN KNOB F/1/2" SHAFT. URC#KN02, \$1.50

1 1/2" DIA. FLUTED KNOB W/1 1/2" SKIRT; BRASS INSERT FOR 3/8" SHAFT. URC#KN04, \$.50

1-5/8" DIA. FLUTED KNOB W/2" SKIRT; BRASS INSERT FOR 3/8" SHAFT. URC#KN03, \$.75

Brown 1" dia x 1 1/2" high knob for 1/2" shft. #KNB025, 2/25¢

HAMMARLUND DIAL #31227-3 2 1/2" silver skirt marked 10 to 0; 1-5/8" dia knurled knob. #B821, NEW, \$1.50

MATCHED KNOBS, rounded edge w/4 sets of 4 hash ridges. Looks like old Hammarlund. #B168 2 1/2" \$3 #B570 1 1/2" \$2

HALLICRAFTERS with big 1 1/2" dia; arrow & grip bar. #H81014 new \$1.50

## BAR TYPE KNOBS

BAR TYPE BAKELITE KNOB FOR 1/2" SHAFT. 1 1/2" x 1 1/2" x 5/8". SET SCREW TYPE. KNBN012 \$.25

BAR TYPE BAKELITE KNOB FOR 1/2" SHAFT WHICH MUST BE TAPPED FOR SET SCREW. 1 1/2" x 1 1/2" x 5/8". KNBN013 \$.25

RECTANGULAR BAR TYPE BAKELITE KNOB 1 1/2" x 1 1/2" x 5/8". WITH BRASS INSERT FOR 1/2" SHAFT. SET SCREW TYPE. KNBN014 \$.25

Pointer knob with brass insert for 1/2" shaft; 1 1/2" x 1 1/2" x 5/8". #KNBNQ26 25¢ ea

Bartype bakelite knob with pointer. For 1/8" shaft; vertical set screw. 1 1/2" x 5/8" x 1/2". KNBN016 4/\$1.00

Rounded bar style knob, 1-1/8" long x 1/2" across x 1 1/16" H. Brass insert f/1/2" dia sh. #KNART13 3/\$1.

ALCO-KNOB, 1" dia x 5/8" high modern style fluted knob with 5/8" dia chrome center trim; brass insert for 1/2" shaft. NEW 3/\$1.

1-5/8" dia plastic knob with 2 1/2" dia aluminum skirt calibrated 0 to 10. Brass insert for 1/2" dia shaft. #9414 NEW \$.50 ea

1" dia plastic knob with 1 1/2" dia skirt calibrated alphabetically A-Z, Y-Z. Aluminum skirt; f/1/2" shaft. #5312 NEW \$.50 ea

3/4" RIBBED KNOB 7/8" DEEP 1" SKIRT F/1/2" SHAFT DULL BLK. KNB7820 35¢

5/8"x3/4" SAME AS ABOVE BRIGHT BLK. KNB1261 20¢

1" dia. x 1 1/16" high knob, Ribbed style; Insert recessed 1/2" from base for flush fit. KNE2279, 30¢ ea.

1 1/2" KNOB MARKED "INCREASED OUTPUT"; 1/2" HOLE WITH SET SCREW. 1 1/2" THICK; METAL. KNBN023 \$.25

2" TUNING KNOB black w/chrome-finish trim. Metal insert f/1/2" d shft. #ROB-B/C \$1.25

## SCR HEATSINK ASSY

SILICON RECTIFIER BRIDGE, single phase half-wave; GE #C14114CX5 or equivalent. Rating approx 500 V 35 amps. 7x6x5, 4 lbs sh. #KS-195761L, used, \$3.95 \$6.95

SPRAGUE #JN14-1551A 3 X 50 AMP 440 VAC 60 HZ LINE FILTER, 1 1/2" x 3 1/2" x 18 lbs sh. NEW, \$18.95

GENISCO GF-1901-75D 75 AMP 250 VAC/600 VDC FILTER, knock-outs for hook-up; long style 2 1/2" x 4 1/2" x 23 lbs. NEW \$14.

## RO-367/U FITTING

ANDREWS TYPE 79R FITTING for 5" dia coax H or RO-367/U; 50 ohm, 6-1/8" dia KIA flange. 19 lbs sh. Unused w/kit, \$269 \$60.

ADJUSTABLE ALUMINUM SHOCK-MOUNT WITH FOUR 1 1/2-3 LBS. SHOCKMOUNTS. PERFECT FOR SMALL POWER SUPPLY, AMPLIFIER OR OTHER GEAR. FITS 5-1/8" W X 6 1/2" TO 7 1/2" DEEP UNIT; 2" HIGH. SH WT: 3 LBS. #MT-569A/ARA, UNUSED, \$2.50

## SEALED BEAM

RF LINE FILTERS, unused. \*\*\*\*\* SIEMENS #B84104K, 3 amp 115/230 VAC 60 HZ; plug & lead connect. 1 1/2"x2 1/2", 1 lb. \$1.

#410-3, 2x5 amps 125/250 VAC 50-400 HZ; four solder terminals: 2x2 1/2"x1 1/2", 1 lb. \$1.25 ea.

Sprague #JN10-2296A1, 2x12 amp 250 VAC 60 HZ; solder terminals. 2 1/2"x1 1/2", 2 lbs. \$3.95

Sprague #JN17-2028A, 300 amps 100 VDC; lug terminals, 7 1/2"x3 mtg plate. 7 lbs. \$12.95

#537-6615, 55 amps 30 VDC; two stud terminals. 2 1/2"x2, 3 lbs sh wt. \$2.95



## NATIONAL HFO COILS

Individual coils for HRO receiver coil set plug-ins.

Unused, \$2.50 ea; 4/\$8.00  
\*\*\*\*\*

KHZ  
50-100: E112, E115/B143  
E114/B144  
100-200: E109/B139 E110 E111  
175-400: B112, B113  
900-2000: B120  
2-4 Mhz: B123  
4-7 " : B127, B128, B129  
7-14 " : B130, B131  
14-30 Mhz: E80, E87

## BC-610

BC-610 XMITTER  
PLUG-IN TUNING  
UNITS, 4 lbs.

\*\*\*\*\*  
# MHZ Price  
C-387D 2-3.5 WVL \$7.50  
C-388C 3.5-4.5 WVL 7.50  
C-389C 4.5-5.7 WVL 6.00  
C-390C 5.7-8.0 WVL 8.00  
C-447B 8-11.0 WVL 6.00  
C-449B 14-18 WVL 6.00  
TU-47 (2.0-2.5 Mhz), TU-48  
(2.5-3.2), TU-49 (3.2-4.0)  
TU-50 (4-5), \$7.50 each  
TU-52 (6.35-8.0 Mhz) \$7.50  
TU-54 (12-18 Mhz), \$12.00

## VACUUM CAPACITOR

by Jennings  
with connectors. Unused.  
3.0mmf 15kv "V" \$2.75  
Jennings or equal mfg. used.  
12mmf 20kv "V" \$10.00  
50mmf 20 Kv "V" \$12.00

## TRAVELING WAVE TUBE



EMI 7640 TWT, similar to  
Hughes 313H; 2.0-4.0 Ghz,  
1 KW output, 30 db. 16x3x3  
x5; 20 lbs. sh. Sold as an  
experimenter's item only;  
not guaranteed. \$17.50



ITT D-2013 CW TWT, 5 watts  
33 db gain, 8.0-9.6 Ghz;  
6.3 v. heater. 12x1x1/2" dia.  
3 lbs. sh. Unused, \$45.00



RCA 4012/Al157 TWT, 2.0-  
4.0 Ghz, 36 db min., 20 MW  
min. 15x1x1 x 3x3/4" x 1x1/2".  
4 lbs. sh. Unused, \$40.00

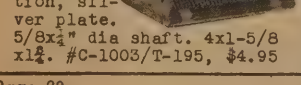


VARIABLE  
CAPACITORS,  
removed f/  
T-195/GRC  
transmitter.

#C-222/T-195, 25-485 pf  
one sec.; 25-437 pf the  
other. 0.03" air gap. With  
gears 1 1/2" dia. and 5/8" d.  
4x3x3/4" overall. \$4.95

#C-221/T-195, 13.5-77.8 pf  
one section; 17-99.6 pf the  
other. 0.094" air gap. 2"x  
1/2" dia. shaft. 5x1x1/2 x 3/4  
overall, 2 lbs sh. \$3.95

20-400 PF  
0.02" gap.  
Ceramic  
insula-  
tion, sil-  
ver plate.  
5/8x1" dia shaft. 4x1-5/8  
x1/2. #C-1003/T-195, \$4.95



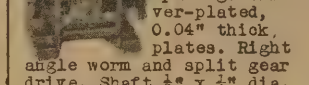
BROADBAND TUNER  
14-50 MHZ  
10-150mmf var  
capacitor  
mechanically  
coupled to  
iron slug in  
a coil which  
moves as the  
capacitor is  
rotated.  
various other  
components.  
3x2x3 #RT-45 \$1.95

TCS VARIABLE  
CAPACITOR, 2  
SEC. 10-360  
MMF. ONE SEC  
10-360 MMF,  
3 BAND CALI-  
BRATED DIAL 4" 1.5 TO 12 MHZ  
SIZE: 7x3x3 3/4; WT: 10 LBS.  
#881 \$3.95 USED

SINGLE SECTION  
11-67 pf .05"  
spacing. Has  
three front  
mount spacers  
for #6 screws  
Shaft 3/8x1/2" dia; o/a 3x1/2  
1-7/8x2 1/2. #3D9067VBS \$3.95

REF-3-14A164, 10-40mmf gap  
0.04". 2Kv. 3x2x2 1/2 \$2.95

HAMMARLUND  
VAR. CAPACITOR  
20-90 pf 0.05"  
spacing. Sil-  
ver-plated,  
0.04" thick.  
plates. Right  
angle worm and split gear  
drive. Shaft 1/2" x 1/2" dia.  
4x3x3 1/2 #446-6571 \$9.95



5-GANG 13-402 pf

5-GANG 13-402 pf/section  
w/removable gearhead for  
spline tuning or 1/2" dia  
shaft. 10x4x2 1/2, 2 lbs sh.  
#C111/ARN-6, \$5.95; 2/\$10.

SINGLE SECTION 14-365 pf  
0.03" gap. Shaft 1-5/8x1/2"  
dia; o/a 4-5/8x1-5/8x2 1/2,  
2 lbs. #3D9365V-2, \$4.95

THREE GANG, 15-85 pf/gang  
0.03" gap; 3x1-5/8x1/2.  
#074-049 unused \$4.95

3-GANG, 15-160 pf/section,  
0.02 air gap; 1" dia shaft  
1x4x1 1/2. #3TH160, \$3.95

BC-624 RECEIVER  
R.F. TUNER ASSY  
100 - 156 MHZ  
A.M. W/VARIABLE  
CAP., COILS, TUBE  
SOCKETS. OSC.  
SEC. P/O SCR-522  
5x5x5; WT: 7LBS  
22K11150 Used \$3.95/N \$5.95

3-GANG, 2/25-500 pf & 20-  
180 pf; 5/8x1/2" dia shaft.  
4x1x1 1/2; #ASP4741, \$4.95

3-GANG, 2 sec 20-365 pf,  
1-sec 17-175pf; 3x1/2" dia  
shaft. 3x1x1 1/2; #5740, \$3.

2-GANG 6-16 pf/gang 0.05"  
gap. Silver-plated with  
brass gears; p/o TS-497  
sig generator. 7/8x5/16"  
dia shaft; o/a 4x2-3/8x3.  
#3330-313, unused, \$5.95

TUNING CAPACI-  
TOR F/RT-176/  
PRC-10, 38 to  
54.9 Mhz; 5-  
GANG, 5-33 PF/  
GANG. WITH 1 1/2" AND 5/8"  
DIA. GEARS; 3/16" DIA SHFT.  
1x1-5/8x4, USED, \$4.95

BROADBAND TUNER  
14-50 MHZ  
10-150mmf var  
capacitor  
mechanically  
coupled to  
iron slug in  
a coil which  
moves as the  
capacitor is  
rotated.  
various other  
components.  
3x2x3 #RT-45 \$1.95

5-25 PF  
CAPACITOR,  
worm gear  
& ceramic  
insulated  
shaft and stators.  
Rotor plates on common met-  
al shaft; .03" gap. Rating  
made with two sections in  
series. May be modified in-  
to two 10-50 pf sections.  
Gear shaft: 1"x1/8"d. Other  
5/8"x1/2"d. O/A 4x2x1 1/2. Sil-  
ver-plated. #D10-4608 \$6.95

FREQ. RANGE 8-12 MHZ. CONT-  
AINS VAR. CAPACITORS WITH  
SHAFTS 140 MMFD, 190 MMFD.  
2/CERAMIC CAP. 1/MICA CAP.  
4/R.F. COILS, 2/RES. 1/DPDT  
switch, dial, and two knobs  
Rear plugs are broken. 2x8x  
x4 1/2, 4 lbs sh. Used, \$3.95

5-25 PF  
CAPACITOR,  
worm gear  
& ceramic  
insulated  
shaft and stators.  
Rotor plates on common met-  
al shaft; .03" gap. Rating  
made with two sections in  
series. May be modified in-  
to two 10-50 pf sections.  
Gear shaft: 1"x1/8"d. Other  
5/8"x1/2"d. O/A 4x2x1 1/2. Sil-  
ver-plated. #D10-4608 \$6.95

5-25 PF  
CAPACITOR,  
worm gear  
& ceramic  
insulated  
shaft and stators.  
Rotor plates on common met-  
al shaft; .03" gap. Rating  
made with two sections in  
series. May be modified in-  
to two 10-50 pf sections.  
Gear shaft: 1"x1/8"d. Other  
5/8"x1/2"d. O/A 4x2x1 1/2. Sil-  
ver-plated. #D10-4608 \$6.95

5-25 PF  
CAPACITOR,  
worm gear  
& ceramic  
insulated  
shaft and stators.  
Rotor plates on common met-  
al shaft; .03" gap. Rating  
made with two sections in  
series. May be modified in-  
to two 10-50 pf sections.  
Gear shaft: 1"x1/8"d. Other  
5/8"x1/2"d. O/A 4x2x1 1/2. Sil-  
ver-plated. #D10-4608 \$6.95

5-25 PF  
CAPACITOR,  
worm gear  
& ceramic  
insulated  
shaft and stators.  
Rotor plates on common met-  
al shaft; .03" gap. Rating  
made with two sections in  
series. May be modified in-  
to two 10-50 pf sections.  
Gear shaft: 1"x1/8"d. Other  
5/8"x1/2"d. O/A 4x2x1 1/2. Sil-  
ver-plated. #D10-4608 \$6.95

5-25 PF  
CAPACITOR,  
worm gear  
& ceramic  
insulated  
shaft and stators.  
Rotor plates on common met-  
al shaft; .03" gap. Rating  
made with two sections in  
series. May be modified in-  
to two 10-50 pf sections.  
Gear shaft: 1"x1/8"d. Other  
5/8"x1/2"d. O/A 4x2x1 1/2. Sil-  
ver-plated. #D10-4608 \$6.95

## TRANS. CAPS.

DUAL 4-30 MMF 1000 VDC 1x1/2  
1x2, SHAFT 1x1/2 P/O BC-640  
CARDWELL 430/1M REM \$2.95

DUAL 5-25 MMF 2000 VDC 1x1/2  
1x2 1/2 SHAFT 1x1/2 P/O BC-640  
CARDWELL 525/2M REM \$3.95

DUAL 4-20 MMF 2000 VDC 1x1/2  
1x3 SHAFT 1x1/2 P/O BC-640  
CARDWELL 420/2M REM \$3.95

Single 12-65 pf, 0.06" gap;  
3/8x1/2" dia shaft, o/a 3x1/2  
1x2 1/2. #CARD-427B NEW \$5.

BC-624/522 RECEI-  
VER, 3 GANG 6-36  
MMF EACH SECTION  
WITH SLUG TUNED  
TRIM. SHAFT 5/16  
STK#3D9036V  
SIZE: 4x2x2 1/2; 1 LB. \$1.50

Single 7-26.3 pf, 0.06" air  
gap; shaft 1x1/2 dia, o/a  
2x2x1 1/2. #C227/T235, \$2.95

DUAL 6-22 MMF 1500 VDC 1x1/2  
x2 1/2 SHAFT 3/16x1/2  
TELERADIO 622/15M NEW \$1.95

TRIMMER 9-143 pf silver-  
plated; standard/SCD ad-  
just. 1x1 shaft; o/a 2x1x1  
x1/2. #C228/T235, \$2.50

#P-7781569, 14-62 pf, 1x1/2"  
dia shft. 2x1x2x1/2, \$3.95  
#T-7660443-8, 8-28 pf, 5/8  
x1/2" dia shaft. Overall  
1x2x2x1/2, 2 lbs. \$3.95

1-GANG 15-160 pf, 0.03"  
gap; shaft 1x1/2 dia, o/a  
1x2x1x1/2. #1TH160, \$2.50

JOHNSON "M" SERIES, 3/16"  
dia slotted shafts; o/a  
1-5/8x1x5/8. Used:  
#160-110/20M11, 2.7-19.6  
pf; 21 plates, \$1.10  
#160-130/30M8, 3 to 32 pf,  
28 plates, \$1.25

PRE-SELECTOR  
UNIT ASST PART  
OF R-48 REC.  
230-250 MHZ.  
CONSISTS OF RF  
MIXER & OSCIL.  
USING CAG5-2 EA. 9002-1  
EA. TUBES (LESS TUBES) FOR  
USE WITH 30 MC I.F.  
SIZE: 6x5x1/4; 5 LBS. USED \$5

GLASS PISTON CAPACITORS  
#VCJ-770, 15 pf 5/8x1/2 \$1.

VC-30G, 30 pf 2x1/2 \$1.00  
\*\*\*\*\*  
AIR CAPACITORS, 0.02" spac-  
ing; shft 1x1/2 d, 3x1x1x1/2  
#21105-14 8-20 pf \$1.50  
#21105-15 8-35 pf \$1.65

TU-53  
OSCILLATOR  
PLUG-IN  
ASSY. FOR  
BC-610  
TRANSMITTER

REMOVED FROM EQUIP. DESIGN  
FOR 14-50 MHZ. SIZE: 2x5x5  
4 LBS. #B8W502 \$6.95

TRANSMATCH ASSY  
ROTARY INDUCT-  
OR, 16 TURNS, .5-  
4.15 MICRO-HY.  
W/VARIABLE CAP.  
5-50 MMF. 2000v

PRECISION  
TANK TUNE  
CAPACITOR  
25-320 pf  
w/right  
angle  
worm gear reduction tuning.  
0.03" spacing; 1"x1/2" dia  
shaft, o/a 4x2x2x3/4. Remove  
f/equip. #C9/SQ-15, \$8.00

RECEIVING TYPE  
CAPACITORS FOR  
AM-FM-AUDIO  
OSCILLATOR USE  
WITH SHAFTS.

#48842 DUAL 12-90 MMF & 15-  
140 MMF SIZE 1x1x1/2 \$1.00

#66972 DUAL 9-50 MMF & 1-  
100 MMF, SIZE 1x1x1/2 \$1.00

#330V020-H02 DUAL 10-90 &  
14-140 MMF 1x1x1x1 \$1.25

#074-050J-2, 8-20 pf 2x1/2  
shaft. \$1.25

Dual 5-15mmf, ceramic, w/fric-  
tion gear to hold setting.  
0.04" spacing. 2x1x1x1-7/8 in  
1x1 in dia shaft. coil & gear  
removable. #358-3164 \$1.95

## RECEIVING TYPE CAPACITORS FOR AM-FM-AUDIO OSCILLATOR USE WITH SHAFTS.

#48842 DUAL 12-90 MMF & 15-  
140 MMF SIZE 1x1x1/2 \$1.00

#66972 DUAL 9-50 MMF & 1-  
100 MMF, SIZE 1x1x1/2 \$1.00

#330V020-H02 DUAL 10-90 &  
14-140 MMF 1x1x1x1 \$1.25

#074-050J-2, 8-20 pf 2x1/2  
shaft. \$1.25

Dual 5-15mmf, ceramic, w/fric-  
tion gear to hold setting.  
0.04" spacing. 2x1x1x1-7/8 in  
1x1 in dia shaft. coil & gear  
removable. #358-3164 \$1.95

#KS21146L, 3-  
GANG, 7-60  
PF/SEC. 0.03"  
GAP. O/A 5x1x1x1/2, \$3.95

2.3 to 14 pf, 1x3/16" dia  
shaft. #228-6085, \$1.25

3D9200V-19, 4-gang 14-200  
pf/gang; 1x1/2 dia shaft, o/a  
6x2x2x3/4. p/o R174 used \$5.

SINGLE 10-100 pf, 0.02"  
gap; 1x1/2" dia shaft, o/a  
2x1x1x1/2. #3D9100V \$1.95

## AIR PADDER CAP

ALL PADDER CAPS.  
REQUIRE SCREW-  
DRIVER ADJUST.

351-1054 2-8 pf 49¢  
D3535 2-20 pf 49¢  
CTN48785 5-17 pf 49¢  
657-J3 8-55 pf 79¢

SBL72265-2 8-32 pf 59¢  
3D9011V-7 5-14 pf silver-  
plated Hammarlund, 89¢

#CT1C100, 10-120 pf; screw-  
driver adj; 2x1x1x1. \$1.25

#C653/R174, 2-11 pf screw-  
driver adj; 1x1x1, \$0.50

#3D9006V-7 DIFFERENTIAL, 3-  
6 pf, .045" gap; 1x1x1x2,  
1x1/2" D. SHAFT. NEW, \$1.95

20-260 PF  
0.02" air  
gap. Tap-  
pered  
plates for  
linear fre-  
quency; precision worm and  
split right-angle gear  
drive. Double shaft 1" lg  
X 3/16" dia each end. O/a  
5x3x2 1/2. #3D9270V-4 \$12.95

COMMAND RECEI-  
VER VARIABLE  
CAPACITORS,  
3-GANG, TRIM-  
MERS & GEARS.  
2x3x4 1/2; 3 LB.

#6558, 62 PF, 6-9 MHZ, \$4.

REMOVED FROM EQUIP. DESIGN  
FOR 14-50 MHZ. SIZE: 2x5x5  
4 LBS. #B8W502 \$6.95

TRANSMATCH ASSY  
ROTARY INDUCT-  
OR, 16 TURNS, .5-  
4.15 MICRO-HY.  
W/VARIABLE CAP.  
5-50 MMF. 2000v

PRECISION  
TANK TUNE  
CAPACITOR  
25-320 pf  
w/right  
angle  
worm gear reduction tuning.  
0.03" spacing; 1"x1/2" dia  
shaft, o/a 4x2x2x3/4. Remove  
f/equip. #C9/SQ-15, \$8.00

RECEIVER STYLE  
VARIABLE CAP-  
ACITORS, 500 V  
spacing; 1" dia  
shaft. 3x1x1x1/2, unused.

3-gang, 25-500 pf/gang;  
geared tune. ASP3496 \$5.95

## 1820-2520 MHZ



PRISSELECTOR, two separate  
cavities having 21 Mhz band  
width and 3 db insert loss  
@ 1715 Mhz. 1N21B crystal  
mixer 120 Mhz output from  
1820-2520 Mhz injection.  
"C" and "ENC" connect. 9x1x  
x3x3 1/2 4 lb. #PRE/TRC29 \$20.

#2SLT/TRC29 2-SLUG TUNER,  
provides isolation, coupl-  
ing, and impedance match-  
ing between 50 ohm klystrol  
output and P-A input. Two  
slug adjust. 10x1x1x1/2 \$8.

UG-573 C-conn. Used, \$1.25

#3CPR/TRC29 TRIPLE COUPLER  
which fed P-A. 36 db and  
65 db RF outputs; DC out-  
put for P-A meter. 4 "C"  
connections and one 1N21  
connector. 5x2x2x1/2 \$9.95

AM & FM TUNERS

AM FREQUENCY 550 - 1600 KC  
FM FREQUENCY 88 - 108 MC  
UNITS HAVE NOT BEEN USED

F.M. TUNER WITH  
1/120T8 TUBE &  
DIAL. SIZE 3x2x2  
URC#462 \$3.95  
A.M. & F.M. TUNER  
SAME AS ABOVE  
URC#2H02 \$4.95

SPIRAL INDUCTO  
TUNER 60-90MHZ  
W/50PF PARALLEL  
3 SEC. SILVER PL.  
4 1/2 TURNS. 3x1x1x2  
#37695 RE-MOVED \$5.95

LC-902 ANTENNA  
INPUT TANK FOR  
TN-2A/APR-I TUN-  
ING UNIT, FREQ.  
76 to 300 MHZ.  
WITH VARIABLE  
CAPACITOR, COIL, AND 955  
TUBE SOCKET. SIZE: 4x3x3  
WT: 4 LBS. UNUSED \$5.95

LC-702 ANTENNA MIXER TANK  
FOR TN-3A/APR-I TUNING UNIT  
FREQ. 300 to 1000 MHZ. WITH  
VARIABLE CAPACITOR AND COIL  
SIZE: 2x3x3 1/2 WT: 3 LBS.  
PRICE: UNUSED \$3.95

LC-701 OSCILLATOR TANK FOR  
TN-3A. WITH VARIABLE CAP-  
ACITOR AND COIL. SIZE: 4x3x4  
WT: 4 LBS. UNUSED \$4.95

RECEIVER STYLE  
VARIABLE CAP-  
ACITORS, 500 V  
spacing; 1" dia  
shaft. 3x1x1x1/2, unused.

3-gang, 25-500 pf/gang;  
geared tune. ASP3496 \$5.95

3-gang; 2/25-460 & 25-180  
pf; #9776 \$4.75

3-gang, 20-360, 20-280, &  
20-110 pf; 2-speed drive  
1/2" and 1/8" dia shaft.  
#33V021H01, \$2.75

2-gang 25-460 & 35-200 pf,  
3/8" dia shaft. O/a 2x1x1  
1x2. #221657, \$2.00

#C2/R174, 5-42 pf trimmer;  
1x1/2" dia sh, 1x1x1x1/2 \$1.25

#C44/R174, 5-55 pf trimmer;  
5/8x1/2 shaft, 1x1x1x1/2 \$1.50



## INSULATORS

STAND-OFF, CROWS FOOT, 7" Hx1 1/2" D. CAST BASE, 22 CTRS. TOP CAST W/3/16"-20 SCREW #5970-405-8992 \$4.00 SIMILAR, ABOVE 3" 3.00

FEED-THRU INSULATOR (FIG 2) 1/2" HOLE 7/8" DIA. W/NECK 3" LONG 30¢ 6" LONG 50¢ 8" LONG 60¢ STOCK NO. 1014-(LENGTH) SAME AS ABOVE OVAL TWIN-

PORCELAIN STAND-OFF INSULATORS, SCREW THREADED. #P-4H-.75D, 8-24 THRD, \$.50 #P-5H-.75D, 8-24 THRD, .65 #P-6.75H-10, 10-24 THRD, .85

STRAIN INSULATOR, 3x2 1/2" dia; 2" to 3" dia taper feed-thru core. 1 lb sh. #STR-84 \$.95 IN-88 SPREADER INSULATOR, 2x2 1/2" dia; 1/16" hole, 4/16" dia. #3G584 IN-84 FEED-THRU CONICAL SHAPE, 5" LG. O/A; 2 CONICAL SHAPED 1-1/8 LG. X 1 1/2" DIA. AT BOTTOM, 1" AT TOP, 1/4" DIA. ROD WITH 1/4 20 THREAD WITH NUTS/WASHERS 1 LB. 25¢ EA. 5 FOR \$1.00

GLASS-BONDED MICALEX STRIPS 10" Lx1" Wx5/8" Th. Five holes .2" dia. #3G110-160, \$1.50

GE #K7102768P1, same as above, 7-3/8" Lx3 1/2" Wx3/8" Th. Ten holes, \$3.00 ea.



INSULATOR THREADED BRASS EACH END FOR 1/4" SCREW. #CLASS 16U-2x1 1/2" \$2. " 16U-3x2" \$3.

INSULATOR STANDOFF FEED-THRU, THREADED ONE END; 3/8" HOLE. ACE-3"Hx1 1/2" \$1.

STRAIN INSULATOR, 4x2 1/2" dia; 1" dia core feed-thru 1 lb. #STR-1610, \$1.95 ea

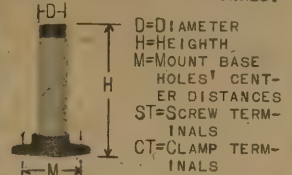
STRAIN INSULATOR BROWN 2 1/2"x 1 1/2" HOLES EA END, OPPOSITE SIDES. #3G100 PRICES: 79¢ EA. 4 FOR \$3. Box of 200 \$125.00

ART-13 TRANSMITTER ANTENNA INSULATOR PANEL; WITH 3x4 OBLONG INSULATOR WITH TWO SPRING-TYPE BINDING POSTS. ALSO A 2x1 AND A 3x2 CONICAL INSULATORS WITH PUSH-TYPE BINDING POSTS. WT: 1 LB. COMPLETE ASSY. USED \$1.00

STAND-OFF INSULATOR H-1 1/2, B-1 1/2, A-1 1/2, 1/4" BOLT REQ. 1 1/2" MTG HOLE #PP-1048 NO HARDWARE 3 FOR \$1.00

## STAND-OFF'S

STAND-OFF INSULATORS, CROWS FEET TYPE. BRASS AND PLATED BRASS BASES AND TERMINALS.



#B-H3-D1.25-ST3, BROWN CER-AMIC; M=2.25" TERM. CAP SIZE: 7/8x1-5/8" DIA. SHPG. WT: 2 LBS. \$2.75 #B-H4-D1.25-ST2, WHITE; M=2.25" TERM. CAP: 1x1-5/8" DIA. 3 LBS. \$3.25 #XW-H5-D1-ST, WHITE; M=2.25" TERM. CAP: 1x1" DIA. \$3.00 #W-H5-D1.25-ST, WHITE; M=2.625" TERM. CAP: 3/8x1 1/2" DIA. 3 LBS. \$3.75 #B-H5-D1.25-CT, WHITE; M=2.25" TERM. CAP: 1x1-5/8" DIA. 3 LBS. \$4.00 #BL-H6-D1.25-ST2, BLACK PAINT ON BRASS; M=2.625" TERM. CAP: 1 1/2x1 1/2" DIA. SHPG. WT: 4 LBS. \$4.25 #B-H8-D1.25-ST2, brown; M=2.625" TERM. CAP 1x1 1/2" dia; 3 lbs sh. \$5.50 #B-H7-D1.25-ST, BROWN; M=2.25" TERM. CAP: 5/8x1-5/8 SHPG. WT: 3 LBS. \$4.75 #W-H8-D1.75-NTH, WHITE; M=3.75". NO TERM CAP; THREADED. 6 LBS. \$5.25

## FLEXIBLE COUPLING

CERAMIC FLEXIBLE COUPLING 1" dia x 2" for 1" dia shaft. #COUN003-2, 45¢ ea #COUN008; 2-5/8" dia x 2", for 3/8" dia shaft. 79¢ ea #COUN009; 2X2 CERAMIC COUPLING FOR 3/8 dia shaft. 69¢ ea #COUN010; 3 1/2" dia x 1 1/2", for 3/8" dia shaft. \$1.25

## AC LINE CORDS

3-COND. GROUNDED equipment cord, 8' #18 wire. Molded plug; black. #FW-3CG \$1.85 #W14-3CG, as above but #14 wire; black. \$2.00 ea 3-COND w/business machine plug, fits most Hewlett-Packard equip. Without AC plug; 5 1/2'. #HP-3CG \$1.50

MORE --- DOLLAR DAZE

TOGGLE SWITCHES, SPST cut-offs, 5/\$1.00

PUSH SWITCHES, SPST norm-open, 5/\$1.00

SLIDE SWITCHES, 2PDT and SPDT, 5/\$1.00

SPST ROCKER DIP SWITCHES FOR PC board use. Can be soldered or fit in socket. Grayhill mfg. NEW #763B04, 4 sw, 3.75; 5/\$3.



SELECTOR SWITCH, 15 BUTTON, MAKE ONE BREAK ONE, RELAY RELEASES ALL BUTTONS WHEN ACTIVATED, 115 VAC OR 24VDC SIZE: 12x7x2; WT: 7 LBS. URC#1524115 NEW \$3.95

## MICRO SWITCHES



SPST MICROSWITCHES 1-7/8x 5/8x1 1/2, 30¢ ea unless otherwise noted. Normally open-n.o. Norm closed-n.c.

#WHBT349A-1 n.o. lever

#YZ-3RLTC n.o. lever 15A

#SW-186 n.o. ext-pin

#WZ-R39 n.o. ext-pin

#2MC3-1A n.o. pin; 1-5/8x 1/2 size.

#V3-23 n.o. or #V3-21 n.c. pin; 9/16x1x1-3/8 size.

MU-SWITCH Type D in split dye cast housing; 1" tap conduit hub. 17/8.5 amp 125/250 VAC, new, 75¢

SPDT, one side n.o./other n.c.; 1-7/8x5/8x1 1/2, 40¢ ea

#3Z-3R244T4, pin style

#WHBT349B-1, lever style

#BZ-2R, button w/mtg 50¢

#V3-1 9/16x1x3/8 size

ARROW-HART 100 AMP 600 V AC tap switch 2-deck 2-pos on-off. 6 1/2x6 1/2 x4 1/2, 15 lbs. #8944 NEW \$12.

## TAP SWITCHES

TAP SWITCHES, 120/240 VAC 10/5 amps unless otherwise noted; 2 1/2" dia. Used.

#AHH-23-10; 2-deck 3-pos w/knob \$2.

#AHH-23-10; 2-deck 3-pos and OFF.

Cont. turn; 15/10 A. No knob; 3/16" d shaft. \$2.25

#AHH-33-10; 3-deck, 3-pos with knob, \$2.50

#AHH-63-10; 6-deck, 3-pos with knob, \$3.50

#AHH-2W-3W 3-pos with OFF. 120/240 VAC 30/15 A (2-wire), 15/15 amp (3-wire). 1-7/8x 1 1/2x1 1/2, 2 lbs sh. Used w/knob \$2.50

OHMITE 412-12 TAP SWITCH, 12 taps rated 50 amps AC 300 volts, 150 V between taps. Shaft 1 1/2" dia; o/a 4" dia x 2 1/2, 4 lbs. \$7.95

ES TAP SWITCH, 60 amp 500 VAC/250 DC 4-position 2-deck, 6 cont/deck. Pos 1 makes cont 2-3, P2 (1-2-4), P3 (1-5), P4 (1-2-6). 5 1/2x6x4 1/2, 10 lb ES#125402A, unused \$16.95

## PUSH SWITCHES



DPST normally open, 1 amp 250 VAC; #PSW004 35¢

DPST interlock n.o., (3Z-9825/254), #PSW006 65¢

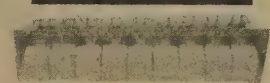
SPST pull switch, normally open, #PSW007 35¢

SPST normally closed case ground; #PSW008 35¢

SPST normally closed, Grayhill #4002 50¢

2-BUTTON momentary; red breaks, black makes. 3/8x 1-5/8x1-1/8; #RB-EM \$1.50

## MULTI PUSH



SWITCHCRAFT DW-Type, each section DPDT 3 amps AC; 0.5 A DC 125 V non-inductive. Can use T-1 1/2 size lamp. NEW #67097-506, 9-button Push-on/Push-off; 1x6 1/2x1 1/2 \$7.75

#67091K-506, 9-button interlocked, \$6.50

#67137-506, 13-button Push-on/Push-off; 8 1/2"W. \$9.75

#67131K-506, 13-button interlocked, \$7.95

## MINI-TOGGLES

MINI-TOGGLE SWITCH STRIP, 9-SPDT C&K ULL and one U15 momentary toggles soldered to PC board; 13/16"L handles. 2 lbs. #MT-9-1M \$4.50

CUTLER-HAMMER mini-toggles, all 120 VAC 8 amp; NEW:

SPDT center-off \$1.50 3/\$4

3PDT on-on, \$1.65, 3/\$4.25

4PDT on-on, \$1.75, 3/\$4.50

## SWITCHES

MINIATURE SWITCHES, all new Black: blk. White: wh.

DPDT on-on, blk. or wh button (a); C&K #8221, 65¢

SPDT on-off-on, wh. toggle (b); Alco #MLD106E, 75¢

SPDT on-on, blk. rocker (c) JBT #MR2-123, 65¢

SPDT on-on, blk. push-type Alco #3P105D, 60¢

SPDT on-on 1-side momentary blk or wh push; C&K168 65¢

SPST red or wh. tog. (e), not mini. #CH381K22 60¢

SPDT mini-toggle, baton throw; on-on. #7101T 65¢



DPST one side mom. (f) toggle; Alco #CST-023TA, 2/\$1 SPDT n.o./n.o., push button (g); Lionon #76-2450, 2/\$1 DPDT on-on slide (h), 3/\$1 DPST sub-mini slide switch; Chicago EIA 50, 5/\$1 Interlock switch (i); 10 A Cherry #E89-30A, 2/\$1

## SWITCHES



AIRCRAFT TYPE SWITCH TWO HOLE MOUNTING FIG. #1

CIR CON RATING NO PR

SPST NEW 5/125 B-15 .65

ABOVE MOMENTARY N/CLOSED SPDT REM 5/125 B-9A .50

(above center-off) SPDT NEW 15/125 B-1B .30

SPDT REM 5/125 B-7A .55 (CENTER OFF, MOM ONE SIDE)

## TOGGLE SWITCHES

TOGGLE SWITCHES SINGLE HOLE MOUNTINGS: CONDITION NEW & "REM" REMOVED FROM EQUIPMENT, ALL GUARANTEED.

CIR CON RATING NO PR

SPST REM 8/125 881K2 .35 (ABOVE SWITCH MOMENTARY)

SPST REM 6/125 SW-105N .30

SPDT REM 8/125 ST-130 .25

(\*ON\* BOTH SIDES) DPST REM 3/125 7463954 .25

DPST REM 5/125 ST-22R .35

4PST REM 15/125 SW3115 1.00

4PST REM 15/125 7661K5 1.00

TEN PUSH SWITCH STRIP EACH D.P.D.T. INDIVIDUAL HOLD OR COLLECTIVE OR RELEASE, NEW 12x4x3/4; NO.4C5231 \$2.25

ROCKER SWITCHES 0319 SPST 39¢ 3 FOR \$1.00

0348 DPDT 59¢ 2 FOR \$1.00

0320 SPDT MOMENTARY BOTH SIDES. 65¢ EA. 2 FOR \$1.20

0347 DPDT MOMENTARY BOTH SIDES. 80¢ EA. 2 FOR \$1.50

## PUSH BUTTON SELECTOR

WHITE BUTTONS, 1 THRU 4

SEPARATE CONTACTS, 5, 6, 7

MAKE 2, 3, 4 RESPECTIVELY W/COMMON. RED BUTTON RELEASES ALL. RATED @ 120/240VAC 8A

SIZE: 4 1/2x1 1/2x2 1/2; WT: 2 LBS. GE#ASP8128-417 UNUSED \$7.75

## LEVER SWITCHES

4PDT ONE SIDE 2PDT OTHER SIDE, BOTH SIDES MOM. #1155 NEW \$2.00

TV-2 tube test P1 lever sw; make 2-break 2. Removed \$2.

2PDT ONE SIDE, OTHER 2 MAKE, P/O EE-2, USED \$1.00

SPDT make before break and 2/SPST normally closed; single hole mount. Tele-type #129596 (FSN #5930-259-6890), unused, \$1.50

2PST ONE SIDE ONLY HOLD, CTR OFF, ONE HOLE MTG. SWITCHCRAFT 513148 NEW \$1

## 200/400 AMP TAP

#3238 3PDT TAP SWITCH with "off"; rated 200 amp 250 VDC or 500 VAC. 6x9x9, 20 lbs; ES mfg. New \$19.95

#0279 3PDT TAP SWITCH, no "off"; rated 400 amps 600 VAC. 9x9x9, 25 lb. \$29.95



## EQUIPMENT BLOWERS



18 VDC 2400 RPM 5-BLADE FAN removed from oscilloscopes; runs well on 6 VDC. 7" dia blade rotation; o/a 8 1/2" dia X 5 1/2" depth. Includes eight single TO-3 heatsinks; 8 lbs sh. #B401/USM, used, \$16.95

DUAL BLOWER, 3450 RPM 1/12 HP 115 VAC 60 Hz 1.1 A GE-motor; 3" inlet, 3 1/2" outlet. W/capacitor; 11x6x6, 10 lbs. #GE-JC284 used \$15.



TORRINGTON BLOWER, 200 CFM 220 V 3000 RPM (100 CFM 115 VAC 1500 RPM). 4" dia intake; 2 1/2 x 3 out. Outlet mtg 4" dia. O/A 7x7x7 1/2, 10 lb Torrington #A13980, unused \$18.95

EASTERN AIR TWO SPEED BLOWER, 2800/3200 RPM capacitor-start motor 1/40 HP 0.38 amp 115/230 VAC 50/60 Hz. Mounted on base w/4 mfd capacitor, terminal strips. Approx 150 CFM. Intake 3" dia, outlet 1 1/2 x 2 1/2. O/A 8 1/2 x 11 x 6 1/2, 14 lbs sh wt. EAD#B747M1-C, used, \$12.95

FASCO DUAL BLOWER 50 C.F.M. 115 VAC 60 Hz 0.74 amp @ 2800 RPM. Outlets 2x1-5/8. One outlet is parallel to mounting base; other is at 90, but can be modified as shown in picture. Inlets 2 1/2" dia. Overall 7 1/2 x 6 x 5 1/2, 12 lbs sh. Fasco type 21, #127S217, unused, \$10.00

5-BLADE COOLING FAN removed from military power supply; 4 1/2" dia rotation. 115 VAC 0.1 amp 3300 RPM; w/capacitor. 2 1/2" D. #FAN-2054, \$5.95

BLOWER/VACUUM, 115 VAC solenoid reverses intake/outake allowing unit to work as blower or vacuum. 1 1/2" dia hoses; 6x8 dia, 12 lbs. #3M-CFB, \$12. Less solenoid, \$9.

5-BLADE 7" DIA FAN in 7 1/2" dia X 6" h housing; 115 VAC 60 Hz. Can probably be adapted to duct fan. With 2 mfd capacitor; 9 lbs sh. #14-20/5B-DF, used, \$14.95

4-BLADE 6" DIA FAN in conical 7 1/2" x 5-3/8" dia X 7" high housing; 115 VAC 60 Hz. Adapt to use as duct fan. 8 lbs sh. #3M/4B-DF, used, \$9.95

FAN-TYPE BLOWER, 115 VAC 60 Hz 20 watts; 4" plastic fan blades. Open frame low-noise motor in metal case-ment-type frame. Approximately 100 CFM. 13x5x2, 5 lbs sh. Howard #1075-3102, used, \$4.50

## HEATSINKS

9x4x1 1/8" ALUMINUM. DRILLED FOR 3/TO-3. #3T941 UNUSED \$2.75  
12 1/2x5x1" aluminum w/3 or 4 TO-3 transistors. #HS-HSB used \$3.95

HEATSINK PANEL has four 10x2-7/8x1 1/2 heatsinks and six 2N3055's on 10 1/2 x 14 panel; 9 lbs sh. #HS-M32, \$12.00



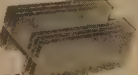
#WE-HID HEATSINK w/diode approx 100 PIV 25 amp; 5x3x1 1/2. Used, \$2.50

#DHS. ANODIZED DRILLED FOR DO-4 DIODES. 3-7/8x2 1/2x1-1/8, 2 FOR \$1.00

DUAL TO-36 HEATSINK, 3x3 1/2x1-3/8; flange mounting. #HST036, \$7.75 each

#3D523-8 HEATSINK, 5x3x1-9/16; drilled for 3 large stud rectifiers (1" dia recesses), \$2.

#2D734 HEATSINK, 7x4 1/2x2 1/2, drilled with two 25/32" dia. holes. 3 lbs sh. Unused, \$3.50



SERIES 680 HEATSINKS, 1 1/2" sq. NEW #1.0G-5-5, 1" high with 0.33" dia. hole for rectifier, 85¢ ea. #75A-16-1, 0.75" high for TO-3 transistor, 75¢ ea.



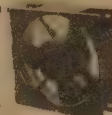
## COMPACT AXIAL FANS



AXIAL FANS, 4 1/2" square X 1 1/2" thick; 115 VAC 60 Hz. Removed from equipment; guaranteed.

Rotron MUFFIN or similar; 3-blade 14W \$9.

5-BLADE axial fan in metal frame; 18 watts. Various manufacturers, used, \$12.

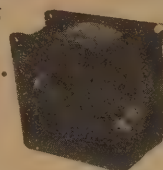


ROTRON BT2A-1 BISCUIT fan, right angle 1"x2" out-take; 115 VAC 50/60 Hz 16 watts, \$12.95

## SPRITE FAN

Small 3-1/8x3-1/8x1-5/8 size. Seven blade plastic fan in die cast housing. 115 VAC 60 Hz. 2 lbs. sh. NEW, \$12.95

## ROTRON MODEL SU2A3



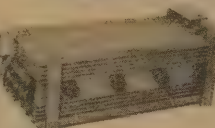
FIVE BLADE COOLING FAN, 4-5/8" dia. rotational no enclosure. Mounting bracket hole centers 5-7/8" apart. 115 VAC 60 Hz. 2 lbs. sh. Airtrol #11-2100, NEW, \$4.95

OPEN FRAME COOLING FANS, 115 VAC 60 Hz; metal or nylon blades. Removed from equipment.



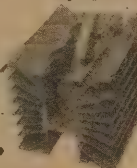
#NCR-50, 5" blade rotation, \$3.50

## HEATSINK ASSEMBLIES

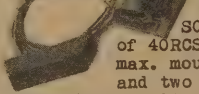


LARGE HEATSINK BANK consisting of five 12 1/2" L x 5" W x 1" Th heatsinks and 19 transistors similar to 2N3055's. Assembly originally part of 4 V. 75 amp power supply. Use as-is or dismantle for parts. O/A 13 1/2 x 5 1/2, 12 lbs sh. Removed f/equip. #HSB4-75, \$16.95

#75-4-2400 SERIES 400 HEATSINK with two 1 1/2" dia. power rectifiers at least 100 PIV 100 amp each. Size: 5x5x6 w/1-5/8 fins. 8 lbs. sh. Removed, \$20.  
#75-4-400S SERIES 400 HEATSINK with 7/8" dia. SCR at least 100 PIV 100 amps. Size: 5x5x4, 4 lbs. sh. Removed, \$5.95



## CROWBAR DVP



SCR CROWBAR CIRCUIT, consists of 40RCS5 SCR rated 1 1/2 A 50 V-max. mounted with thermal switch and two resistors. Potted assembly has trigger voltage adjust 4-7 V. Use with 5 V supplies for overvoltage protection or modify for other uses. #CRBR-40, NEW, \$3.50

## HOWARD 12 W BLOWER

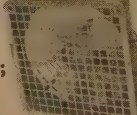
HOWARD #1175-08-4 BLOWER, 115 V 60 Hz 12 watts; intake and out-take each 7/8" dia. Suitable for quiet cooling/blowing uses. O/a 4 1/2 x 3 1/2 x 3 1/2, 2 lbs. w/hose, \$6.95



ROTRON 7" dia FEATHER FAN, quiet 270 CFM free air delivery; three plastic blades in plastic housing, 2 1/2" depth. 115 VAC 50/60 Hz 20 watts max. Used-checked \$14.95



HOWARD 4 1/2" square equipment fan with 5/8" deep aluminum cast frame and five nylon blades. Heavy duty motor rated 19 watts; overall depth 2-5/8". Removed from equipment. #1175-08, \$9.95



5-BLADE FAN, 6 1/2" dia rotation; mounted in 9 1/2 x 1 1/2 aluminum frame with 8x8 removable filter. Motor rated 105/125 VAC 50/60 Hz 1/40 HP 3350 RPM; 4 mF 330 VAC capacitor included. 5 1/2" depth behind panel. 10 lbs sh. #B201/MD141, used, \$10.95



## HEWLETT-PACKARD

HEWLETT-PACKARD TEST METERS, used-complete; add \$30 for "checked" price. Manuals, \$7.50 each when purchased with a meter.

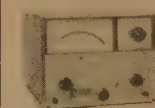
HP-400D VTVM, 0.0001 to 300 V-rms in twelve ranges; -50 to +60 db. 10 Hz-4 Mhz response. 23 lbs sh. Repairable, \$65.00  
HP-400DR, same as above, except rackmount; 30 lbs. \$60.



HP-412A DC VOLTMETER, 1 mv to 1000 VDC in 13 ranges; also 1 microamp to 1 amp and 1 ohm to 100 megohms. Mirrored scale; 23 lbs. \$100.

HP-413AR DC NULL VOLTMETER, 13 zero-centered ranges from 1 mv-1000 VDC; rackmount. \$60.

HP-410ER VTVM, rackmount version of 410B on pg 31; w/probe harness \$60. W/o harness \$25.



HP-431B MICROWAVE POWER METER solid-state unit for 0.1-10 mw over 10 Mhz-40 Ghz depending on thermistor mount; 10 lbs. No thermistor mount \$75.

HP-302A WAVE ANALYZER, 20-50000 Hz, 30 uv to 300 V fullscale; also frequency restorer, oscillator, and AFC circuits, \$225.00  
HP-313A TRACKING OSCILLATOR w/book, \$395.00  
HP-202A FUNCTION GENERATOR, \$50.00  
HP-212A PULSE GENERATOR, \$50.00  
HP-739AR FREQUENCY RESPONSE TEST SET, 300 KHz to 10 Mhz in three ranges, \$75.00

HEWLETT-PACKARD 650A TEST OSCILLATOR for 10 Hz to 10 Mhz in six ranges. Output 30 mv to 30 volts; 600 ohm impedance. Output attenuator 0-50 db in 10 db steps, flat 1 db throughout range. 10 1/2 x 19 x 15, 48 lbs sh. Used, repairable, \$95.00; Cabinet for 650A, add \$10. Manual, \$6.50 w/purchase.



## FLUKE 803D

FLUKE 803D AC-DC DIFFERENTIAL VOLTMETER, 0.1-500 volts AC-DC. Designed accuracy: +0.2% (AC), +0.05% (DC). Response 20 Hz to 10 KHz. 115 VAC 60 Hz required. 12 1/2 x 9 x 16, 35 lbs. Used \$49.50  
FLUKE 801, earlier DC only version of 803D; used-repairable, \$22.00  
FLUKE 801R, rackmount 801; repairable, \$20.00



## HICKOK MULTIMETER



HICKOK 1604M SOLID-STATE MULTIMETER, achieves high gain by using chopper to allow use of AC-coupled amplifiers. AC response to 700 Mhz and AC volt ranges 0-0.5-1.5-5-15-50-150-300 VAC. Eleven DC volts full scale ranges from 0-0.5 V to 1500 V-in 15-50-150 sequence. Fourteen DC current ranges 0 to 1.5 nanoamp to 150 ma in 1.5-50-15 sequence. Resistance ranges from 0-500 ohms to 500 megohms in seven steps. AC probe uses 6AS5 tube. Includes AC and DC probes, two test leads, and partial repro of manual. Requires 115/230 VAC 50-400 Hz. 7 1/2 x 5 1/2 x 9 1/2, 13 lb sh. Used-repairable, \$85. Checked, \$125.00  
T-CONNECTOR for 1604M, \$20 w/purchase of set.

## 2400-3400 MHZ WAVEMETER

TS-117/QP WAVEMETER TEST SET designed for frequency measurements between 2400 and 3400 Mhz. Used to measure antenna radiation, local oscillator frequencies, relative field strength, and relative output. Q from 1800 to 2000. Includes 50 u-ammeter, sensitivity vernier, and frequency micrometer with conversion tables. Accessories AS-23 directive antenna, UG-183 cable, UG-57 and UG-131 adapters and transit case. Uses N connectors. 5x6x3, 15 lbs sh. Used, complete, \$39.95  
Less accessories, \$29.95





## SIGNAL GENERATORS

HEWLETT-PACKARD 606A, 50 KHz to 60 Mhz AM in six bands. Output: 0.1 uv to 3 volts into 50 ohms, vernier and step controlled. Features constant output and modulation and low distortion.

10x19x13 $\frac{1}{2}$ , 50 lbs sh. Used, checked, \$795.00

TS-418/URM-49, 400-1000 Mhz AM, CW, pulse. Output: 0.2 to 200K uv into 50 ohms. 12x17x13 $\frac{1}{2}$ , 70 lbs sh. Used, reparable, \$175.00

TS-419/URM-64, 900-2100 Mhz CW and pulse @ 1 MW max. into 50 ohms. Repetition rate between 40 and 4000 pulse/sec. Delay: 3 to 300 u-sec. 14x17x11, 50 lbs sh. Used, reparable, \$165.

HEWLETT-PACKARD 608ER SIGNAL GENERATOR, 10-480 Mhz AM; rackmount. Checked w/book, \$495.

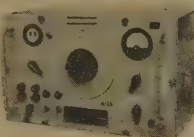
HP-618B GENERATOR, 3.8-7.5 Ghz-reparable \$275



## AUDIO OSCILLATOR

TS-382-AUDIO OSCILLATOR, 20 Hz to 20 KHz in four bands. Output: 0 to 10 VOLTS ACROSS 1000 OHMS. WITH BUILT-IN 60 AND 400 HZ REED FREQUENCY METER. SIZE: 10x12x18 $\frac{1}{2}$ , SHPG. WT: 50 LBS. NET: 45 LBS. PRICE: USED, REPARABLE, \$49.50. CHECKED, \$65.

TS-382F AUDIO OSCILLATOR, MOST RECENT VERSION TS-382. USED, REPARABLE, \$60. CHECKED, \$75. TRANSIT CASE F/TS-382F, USED, \$10.00.



## DISTORTION ANALYZER

HEWLETT-PACKARD DISTORTION ANALYZER MODEL 330BR. WILL GIVE QUICK ACCURATE MEASUREMENTS OF DISTORTION AS LOW AS 0.1% AT ANY FREQ FROM 20 CPS TO 20,000 CPS. IT WILL MAKE NOISE MEASUREMENTS OF VOLTAGES AS SMALL AS 100 MICROVOLTS. THE ANALYZER HAS HIGH SENSITIVITY AND HIGH STABILITY. ITS CIRCUIT 20 DB AMPLIFIER, OSCILLOSCOPE TERMINALS, AND PRECISION VACUUM TUBE VOLTMETER WHICH IS USEABLE SEPARATELY. EXCEPTIONALLY USEFUL FOR ALL KINDS OF AUDIO MEASUREMENTS IN RECORDING, BROADCAST, MOTION PICTURE, LABORATORY ETC. SIZE: 8x19x13 $\frac{1}{2}$  (RACKMTG) WT: SHPG. 40 LBS. PRICES: USED REPARABLE \$185. CHECKED \$225.

TS-723-C SPECTRUM ANALYZER, MILITARY VERSION OF HP-330B; USED, REP, \$165. CHECKED, \$210

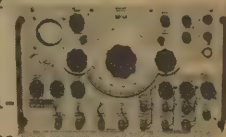
## FM SIGNAL GENERATOR

SG-12/URM- FM SIGNAL GENERATOR, 19.5 to 102 Mhz FM IN FIVE BANDS WITH DEVIATION RANGES 0 to 25, 50, AND 100 KHz; 1000 Hz MODULATION. ALSO IF OUTPUTS ON 1.4, 2.515, 2.65, 2.88, 4.3, 4.45, 5.0, 5.35, 15 Mhz, PLUS TWO SPARE POSITIONS. CALIBRATED OUTPUT VOLTAGES: 0.5 uv TO .01 VOLTS (RF); 0.5 uv TO 1.0 v (IF). OUTPUT IMPEDANCES: 10 OHMS (RF); 25 OHMS (IF). WITH 1 Mhz AND/OR 2 Mhz CRYSTAL CALIBRATOR MARKERS. POWER REQUIRED: 115/230 VAC 50-1000 Hz. SIZE: 12x18x12; SHPG WT: 85 LBS. Used, reparable, \$65.00; Checked, \$125.00. MANUAL, partial repro, \$12. TRANSIT CASE \$15.



## FREQUENCY COMPARATOR

CM-212/USM-144 FREQUENCY COMPARATOR, used with frequency counters to determine with high accuracy frequencies from 10 Mhz to 12.4 Ghz; similar to Hewlett-Packard 540A oscillator. Measures CW, FM, and pulse modulated RF signals. Unknown signal is fed into USM-144 and is compared to a mixed frequency generated from a stable, continuously adjustable fundamental from 100 to 220 Mhz. Difference in the unknown is shown on 2" dia CRT (2B1) display. Final determination of the input signal made by the zero beat of the fundamental multiplied by the appropriate harmonic. Requires 115 VAC 50-440 Hz; 13x19x13 $\frac{1}{2}$ , 65 lbs sh wt. Used, reparable, \$99.50. TRANSIT CASE \$10 w/purchase. MANUAL \$10 w/set



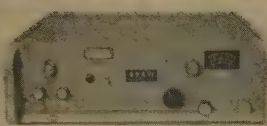
## 0.1-10 GHZ FREQ. METER

TS-186/UP FREQUENCY METER, measures frequencies from 100 Mhz to 10 Ghz using harmonics of a 50-1250 Mhz heterodyne oscillator. Zero beat dial readings are interpolated into frequencies via a calibration book. Zero beat indicated on an 0-1 milliammeter or monitored through a 600 ohm headphone jack. RF signal input must be from 500 Mv to 1 V for proper use. With tubes 2C40, 955, 5Y3, 2/OD3, and 5/6SJ7. Power required: 115 VAC 50-1000 Hz. 9x18x12; 48 lbs. sh. Used, reparable, \$55. Checked, \$95. MANUAL f/TS-186, partial reproduction, \$8.50



## 3.7 TO 8.4 GHZ GENERATOR

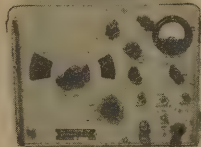
POLARAD 1107 SIGNAL GENERATOR, 3.70 to 8.40 Ghz CW, square wave, and sawtooth FM; has three place mechanical digital tuning. Output attenuator continuously tunable from 0.1 u-volt to 300K uv. Internal square wave and FM rate 800-1200 Hz; FM sweep adjustable over 5 Mhz most of band. 2/A713441 transistors and tube 4/OA2, 3/12AX7, EL34, 8068, A160011 Polarad # klystron. Requires 115/230 VAC; 5x16x18 $\frac{1}{2}$ , 50 lbs sh. Used-reparable w/book, \$350.00



## 10 KHZ TO 50 Mhz

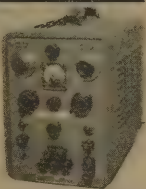
AN/URM-25F SIGNAL GENERATOR, covers 10 KHz to 50 Mhz AM in nine bands. RF output: 0.1 to 100K microvolts into 50 ohms; 2 V adjustable across high load impedance. Modulation 0-50%, 400 or 1000 Hz internal. 1 Mhz calibrator; designed accuracy  $\pm 0.05\%$  above 10 KHz. Requires 115 VAC 50-100 Hz. 11x14x10 $\frac{1}{2}$ , 44 lbs. Used, reparable, \$145. Checked, \$210.00

ACCESSORIES available w/purchase of URM-25F: BOOK-partial repro, \$10. DA-109 Dummy Load \$6. CX-2919 Test Lead Adapter, \$7.50. CU-406 Impedance Matcher, 500 ohms up, \$7.50. CU-408 Impedance Matcher, 70 ohms, \$7.50. BNC Cables, 6", \$1.00; 4 feet, \$1.50



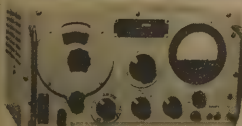
## KLYSTRON POWER SUPPLY

HEWLETT-PACKARD 715A KLYSTRON POWER SUPPLY for low power klystron tubes. Output -250 to -400 VDC regulated 30 to 50 ma for the beam electrodes and 0-900 VDC regulated for the reflector electrode. Reflector volts can be modulated by internal 1 KHz square wave or externally; square wave modulation adjustable up to 120 V peak-to-peak. Frequency modulation for 60 Hz sine wave 0-350 V p-p. Requires 115/230 VAC 50-60 Hz. 7x11x13 $\frac{1}{2}$ , 26 lbs sh. Used, with output cable, \$49.50; Less output cable, \$39.50



## VOLTMETER-VLF RECEIVER

ME-71/FCC AUDIO LEVEL METER, covers 20 to 500 KHz continuously tunable. AS SELECTIVE DETECTOR, IT MEASURES RF CARRIER ACROSS A 135 OHM BALANCED OR 600 OHM UNBALANCED LINE. VARIABLE ATTENUATOR PROVIDES INPUT SENSITIVITIES FROM -70 to -42 DBM INDICATED ON 3" DIA. METER. INCLUDES 100 KHz CALIBRATOR. INPUT IMPEDANCE: 10K OHMS. AUDIO GAIN AND TWO PHONE JACKS. VARIOUS MODELS ("C" PICTURED). POWER REQUIRED: 115 VAC 60 Hz. 17x14x9; 40 LBS SH. ME-71, w/NATIONAL-TYPE DIAL, USED, \$40.00. ME-71B, USED, REPARABLE, \$45. ME-71C, \$50. OPERATIONAL, ADD \$30. MANUAL, REPRO, \$8.50



## SPECIAL SALE VTM's!

VACUUM TUBE VOLTMETERS at reduced prices due to special quantity purchase. All are used.

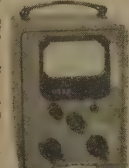
TS-505/U, ranges 0 to 2.5, 5-10-25-50-100-250-500 Vrms plus 1000 VDC scale. Also X1 thru X1 Megohm ranges. Response: 30 Hz to 5 Mhz. With AC, DC, and ohm probes. 9x9x6, 17 lbs. Reparable \$45. NOW \$20. Checked, \$45.

MANUAL, partial repro, \$8.50



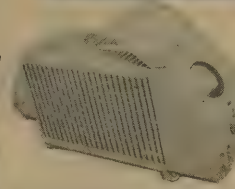
HEWLETT-PACKARD 410B, features 20 Hz to 700 Mhz response with full scale ranges 1-3-10-50-100 and 300 Vrms plus 1000 VDC. Resistance scales X1 thru X1 Meg. High frequency AC probe has EA53/2-01C tube. 11x17x18 $\frac{1}{2}$ , 15 lbs sh. Reparable, \$39.50. NOW \$59.50. Checked, \$109.50. NOW \$85.00. Manual, \$8.50 with set purchase.

ME-180/USM-116, similar electronically to the HP-410B, set has added 0.02 to 1000 MA DC feature. Response to 100 Mhz with AC probe and to 700 Mhz with optional T-connector accessory. AC probe uses 6923/EA52 tube. 7x8x9, 21 lbs sh. Reparable, \$35. Checked, \$65.00. T-connector, \$10 w/set. Manual, par-repro \$10



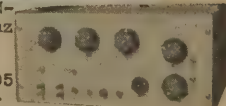
## 20-1400 MHZ WATTMETER

TS-118A WATTMETER, thermocouple type measures RF power over 20-1400 Mhz AM-FM-CW in ranges 20-100 Mhz (2-300 watts), 100-500 Mhz (2-500 W), 300-700 Mhz (2-250 W), and 700-1400 Mhz (2-125 W) depending on thermocouple used. DC millivoltmeter indicate voltage developed and the reading is translated into RF watts by use of calibration charts. SWR less than 1.25:1; Input impedance 50 ohms. Can be used as dummy load with proper adapter (not available). Includes thermocouples MX-1781-1782-1783-1785, tuning shunt MX-1784, connector adapter UG-999, and transit case. 8x6x20 $\frac{1}{2}$ , 45 lbs sh. Used, \$165. MANUAL, for above, partial repro, \$7.50



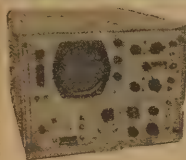
## PULSE GENERATOR

RUTHERFORD B7B PULSE GENERATOR with 2 Hz to 2 Mhz repetition rate in five bands. Pulse delay: 0.0 to 10K u-sec. Width: 0.05 to 10K u-sec. Pulse output 50 V min. into 50 ohm load, positive or negative. Rise/fall time 0.015 u-sec. Sync pulse out 10 V min., 0.05 u-sec width; 0.03 u-sec risetime, positive polarity. Requires 115 VAC 50-60 Hz. 8x19x13 $\frac{1}{2}$ , 50 lbs sh wt. Used, reparable, \$65.00





## DUAL-TRACE PRICE-CUTS



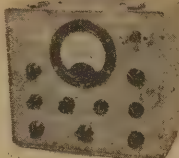
AN/USM-140C OSCILLOSCOPE, DC to 30 Mhz mainframe, similar to H-P 170A. Includes MX-2930 dual-trace vertical plug-in with DC to 22 Mhz passband. Input impedance: 1 meg-ohm shunted by 30 pf. Input sensitivity: 0.02 volt/cm to 20 v/cm. FUNCTIONS: CHANNEL

A, CHOPPED, A-B, AND ALTERNATE. HORIZONTAL MX-3078 PLUG-IN SWEEP RATE: 0.1 u-sec/cm to 5 sec/cm. HORIZ. SENSITIVITY: 0.1 v/cm to 10 v/cm. MAGNIFIER X1 to X100 in seven steps. CALIBRATOR: 0.2 mv to 100 v. in nine ranges. POWER REQUIRED: 115/230 VAC 50-1000 Hz. SIZE: 14x19x22; SHPG. WT: 110 LBS. PRICE: USED, REPAIRABLE, \$195. CHECKED, \$295.

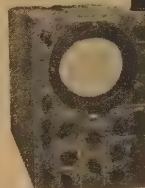
## TRANSISTOR TESTER

HICKOK MODEL 1890M TRANSISTOR TESTER, checks transistors in and out of circuit. Collector leakage current ( $I_{cbo}$ ) ranges: 0-50-500 ua and 50 ma. Collector current ( $I_{co}$ ) 0-1-10-100 ma. Current gain Beta: 0-50-100-200-400. AC test signal 1000 Hz. Transistor input resistance range 50-10000 ohms; circuit input impedance 25-100000 ohms. Collector voltages 0-1.5-3-4.5 VDC. Has transistors 4/2N651A, 2N650A. Requires batteries (not supplied).

Eveready 763 (22.5 V) and two Burgess 2370-ST (4.5-3-1.5 V). With partial repro of manual. 10x10x9 $\frac{1}{2}$ , 18 lbs. Used-repairable, \$34.50



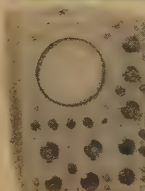
## DUMONT 304 SCOPE



DUMONT 304H OSCILLOSCOPE, has big 5" CRT (5CP1). DC to 100 KHz response; usable to 300 KHz. 100 MV full scale vertical sensitivity. Sweep: 2-30 KHz. Max. sweep rate: 1" per u-sec. Input impedance: 2 meg-ohms paralleled by 50 pf. Graticule not included. Power required: 115/230 VAC 50-60 Hz

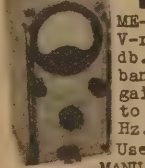
9x13 $\frac{1}{2}$ x19; 65 lbs. sh. Used, repairable, \$45. 304H SCOPE shipped with 5CP7 CRT, \$49.50. DUMONT 304A SCOPE, same as "H" model, but uses 5ADP1 flat-faced CRT. Used, rep., \$50. MANUAL for 304A or H, partial repro., \$8.50. DUMONT 304AR, like 304A but rackmount, \$45. DUMONT 401 SCOPE, DC-500 KHz, 50 lbs, \$60. HICKOK 770 SCOPE, DC-5 Mhz, 60 lbs, \$65.00. BROWNING OL-23 SCOPE, DC-5 Mhz w/triggered sweep and sweep delay; 80 lbs sh, \$80 \$60. OS-51/USM-24C SCOPE, 2 Hz-8 Mhz, 63 lbs \$60.

## DUAL TRACE 15 MHZ SCOPE



TEKTRONIX 516 OSCILLOSCOPE featuring DC to 15 Mhz response, dual-trace, and 5" CRT. Vertical sensitivity: 0.05 to 20 v/div in nine calibrated steps; to 50 v/div using vernier; 23 nsec rise-time. Sweep range 0.2 usec/div to 2 sec/div in 22 calibrated steps; to 6 sec/div with vernier; 15 trace magnifier. Dual trace modes Channels A or B only, chopped, or alternate. Squarewave calibrator in 11 steps from 0.05 to 100 V. Automatic triggering; external trigger requires 0.5-25 V signal. 115 VAC 60 Hz; 13x9x2 $\frac{1}{2}$ , 50 lbs sh. W/book. Used-repairable, \$185. Checked, \$235.

## ME-6D VOLTMEETER



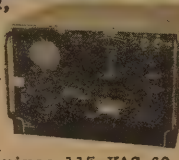
ME-6D/U VTVM, covers 0.005 to 500 V-rms in six ranges and -65 to 57 db. Built-in 15 Hz-250 KHz wide-band amplifier with max. voltage gain of 4500; minimal distortion to 23 VAC output. 115 VAC 50-400 Hz. 11x6x5 $\frac{1}{2}$ , 14 lbs sh wt.

Used-repairable, \$20. Checked, \$40. MANUAL r/ME-6D, partial repro \$8.50

## 8500-9600 MHZ TEST SET

TS-148/UP SPECTRUM ANALYZER, 8470-9630 Mhz with 3" CRT (3BP1) display. Measures frequencies of cavities, echo boxes, magnetrons, and local oscillators. Receives CW and pulse; transmits CW and FM carrier. 1 MW power output (2K25). Max. spectra dispersion: 1.5 Mhz/in. Requires 115 VAC 60 Hz. 19x13 $\frac{1}{2}$ x25, 45 lbs sh. Used, \$50.00

AN/UPM-33 TEST SET, includes TS-148/UP, wave guides, horn antenna, cables, transit case, and manual; 80 lbs sh. Used, \$85.00



## SSB TEST EQUIPMENT



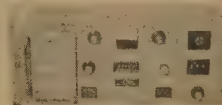
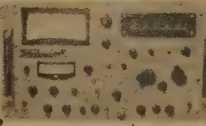
SG-376 TRANSISTORIZED TWO-TONE I.F. SIGNAL GENERATOR for testing SSB equipment. Has two 20 Hz-20 KHz audio oscillators and two independent I.F. oscillators. IF output: 497.5, 498.5, 501.5, or 502.5 KHz only; also 497.5 & 498.5 or 501.5 & 502.5 KHz simultaneously. Output levels: 2-2.5 V into 600 ohms (AF); 1-1.25 V into 50 ohms (IF) with attenuation to 100 db in 1 or 10 db steps. Designed distortion less than 60 db below max signal. Requires 115 VAC 50-450 Hz. 5x19x11 35 lbs sh. Used-repairable \$135; Chcd., \$195. MANUAL for SG-376, \$7.50 if purchased w/set.

SG-823/URM-144 TWO-TONE REFERENCE SIGNAL GENERATOR, used in the measuring of receiver sensitivity and SSB transmitter distortion. Provides two RF outputs which can be used independently or in combination with no intermodulation effects. Frequency outputs: 2.0, 3.6, 4.0, 7.2, 8.0, 14.4, 16.0, 28.8 Mhz at 100K u-volts max into 50 ohms. Frequency adjust  $\pm 0.05\%$  (tone A),  $\pm 0.0025\%$  (B). Distortion at least 60 db below max signal. Requires 115 VAC 60 or 400 Hz. 5x19x11, 35 lbs sh wt. Used, repairable, \$125.00; Checked, \$185.00. MANUAL for SG-823, \$7.50 if purchased w/set.



## VLF TEST SETS

TS-2669 ENVELOPE DELAY DISTORTION MEASURING SET. Acton mfg; multi-function w/5-digit frequency counter & signal generator over 0.1-600 KHz 10 db max. Provides carrier, reference, & sweep signals; 25, 83-1/3, 250 Hz modulation. Delay Millisecond and % Modulation meters; solid-state. Repairable, \$495.



GBO SPACE VLF-12 RECEIVER-PHASE COMPARATOR, solid-state unit used to phase monitor VLF stations; 10-30 KHz range in 100 Hz steps, 60 KHz preset. Built-in chart recorder 1 KHz IF; 100 KHz standard. Built-in chart recorder, 5-place usec counter, 0-80 db attenuator. 115 VAC or 12 VDC in. Repairable \$295.

## FR-149 FREQUENCY METER



FR-149/USM-159 TRANSISTORIZED FREQUENCY METER, covers 125 KHz to 1000 Mhz in three ranges: 125 KHz-2.5 Mhz, 2.5-65 Mhz, and 65-1000 Mhz. CAN BE USED AS A SIGNAL GENERATOR BY PROVIDING EITHER MODULATED OR UNMODULATED SIGNALS.

FREQUENCY FUNDAMENTALS READ DIRECTLY FROM MAGNIFIED AND ILLUMINATED CALIBRATED FILM STRIP AND THEN INTERPOLATED IN ACCOMPANYING CALIBRATION BOOK. OPERATES FROM EITHER SIX "D" CELL BATTERIES OR FROM 115/230 VAC 50-450 Hz. SIZE: 11x11x13; SHPG. WT: 33 LBS. Used-repairable \$99.60 \$75. Checked \$280 \$115

## 10-44,880 MHZ ANALYZER



TS-1010/UPM-84 SPECTRUM ANALYZER, covers 10 Mhz to 44.88 Ghz in eight bands; 5" (5ADP7) CRT display. Resolution  $\pm 3$  db points: 20 KHz all frequencies. Dispersion: 500 KHz-5 Mhz adjustable (10-55 Mhz); 500 KHz to 25 Mhz (55 Mhz up). Spectrum calibrator 160 Mhz center freq -12.5 Mhz.

Sensitivity: as low as -63 dbm (10-150 Mhz); -40 dbm (2.0 Ghz up). RF attenuation 100 db uncalibrated internal 10 Mhz-12.4 Ghz; external attenuators required above. IF attenuation 0-60 db in 6 db steps. Requires 115 VAC 60 Hz. 17x19x26; 180 lbs sh, 145 lbs net. Used-repairable, \$425.00; MANUAL, partial repro, \$15. Some ACCESSORIES available-write.

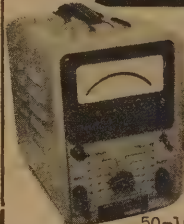
## LINE FREQUENCY

FR-40/GSM-1 LINE FREQUENCY METER, portable meter for monitoring power line frequency. 50 to 70 Hz range in 0.2 Hz/div; 4" wide scale. Input voltage 100-125 VAC. 11x8x6 $\frac{1}{2}$ , 10 lbs sh. Used, checked, \$75.00



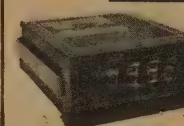
MILITARY TEST EQUIPMENT, used-repairable: AN/USM-50 OSCILLOSCOPE, 3 Hz-15 Mhz with sweep delay; 3" dia CRT, 80 lbs sh. \$75.00. MK-56 PHASE-TEST SCOPE, modified OS-8 (p 33) designed to check delay phasing, \$45.00. TS-34A/UP SCOPE, 30 Hz-1 Mhz using 2AP1 CRT; controls on side, 8x9x20 $\frac{1}{2}$ , 40 lbs sh, \$45.

## ORION AC VTVM



ORION V-100M VACUUM TUBE VOLTMETER with 6" X 4 $\frac{1}{2}$ " h mirrored scale; similar to Hewlett-Packard 400H. Twelve full scale meter ranges from 0.001 to 300 VAC (rms) or -60 to +50 DC. Response 10 Hz to 4 Mhz. Input impedance 10 megohms shunted by 24 pf (.001-0.3 V) or 14 pf (1-300 VAC). Requires 115/230 VAC 50-1000 Hz. 11x7x1 $\frac{1}{2}$ , 22 lbs sh. Used-repairable \$35. MANUAL-partial repro \$10.

## DATA TECH 5513



DIGITAL PANEL METER, 0-20 VDC 3 $\frac{1}{2}$  digits; Data Tech Model 5513-220. Accuracy:  $\pm 0.1\%$  reading plus one count. Input impedance: 10 megohms. Has Sperry 7-segment 0.5" readouts. Also auto polarity, overvoltage protection  $\pm 200$  V., Uses standard TTL and linear IC's for easy repair. Manual and schematic included. 4" W x 1-7/8" H x 5 $\frac{1}{2}$ " D. 3 lbs sh. Checked, \$39.50

COMMERCIAL TEST EQUIPMENT, used-repairable: BOONTON 190A Q-Meter, 20-260 Mhz, \$235.00. BOONTON 202B FM GENERATOR, 54-216 Mhz, \$195. BOONTON 250A RX-Meter, 0.5-250 Mhz, \$255.00. FAIRCHILD 74-13A Calibrated Sweep Delay scope plug-in for 765H/766H/767H, \$125.00. FAIRCHILD 76-08 50 Mhz Dual-Trace amp, \$100. FAIRCHILD 76-01A 25 Mhz Single trace, \$35. GENERAL RADIO 546C Microvoltage, \$60.00. GR-650A Impedance Bridge w/VAC supply, \$130. GR-760B Sound Analyzer, 25-7500 Hz, \$85.00. GR-761A Vibration Meter, \$80.00. GR-1026A Signal Generator, 9.5-500 Mhz AM; FM and phase lock capabilities w/book, \$550. HEWLETT-PACKARD 122AR Oscilloscope, DC-500 KHz dual-trace; rackmount style, \$165.00. H-F-175A Scope, DC-50 Mhz dual-trace, \$345. MARCONI TF791D FM Deviation Meter, 4-1024 Mhz; dev ranges 5-25-75-125 KHz w/book \$245. MARCONI TF-2300 FM and AM Modulation and Deviation, 4-1000 Mhz range; dev 5-15-50-150 KHz. Solid-state; w/book, \$495.00. MILLIPORE Particle Measurement Computer w/GE video camera; designed to identify atmospheric pollutants by analyzing light refraction the air, \$795.00 \$750.00. WAYNE KERR B801B VHF Admittance Bridge \$495.



## TRANSISTORIZED SCOPE



HFE T4214A TRANSISTORIZED SCOPE, British made, uses PC cards for pre-amp, deflection amp, time base, intensity mod, and sweep amp; provision for delay, trigger pick-off, and trigger delay. Approx 300 KHz response; top-to-bottom sweep can be easily changed to left-to-right. Standard oscilloscope controls including 0.1-10 V/div attenuator in 7-steps, 1 usec-10 msec time base 5-steps, X2 multiplier; Time Base Shift, Free Run/Single Shot, etc. Slightly bent frame; less case and power plug. Requires 115 VAC 60 Hz or 12 VDC 1 amp. 9x17x25, 63 lbs sh. (Can be shipped UPS in two packages.) Used, repairable, \$50.00

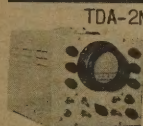
## OS-8 OSCILLOSCOPE

OS-8/U OSCILLOSCOPE with 3RP1 CRT; small portable unit has DC to 2 Mhz response. Vertical and horizontal sensitivity: 0.075 v-rms per 1" deflection. Sweep range: 3 to 50 KHz. Input impedance: 9 megohms shunted by 11 pf DC. Direct access to vertical and horizontal plates. Requires 115 VAC 50-1000 Hz. 9x13x13, 20 lbs sh. Used-repairable, \$49.50; Checked \$75.00 MANUAL for OS-8, partial repre, \$8.50



## TELETYPEWRITER SCOPE

TDA-2N TS-1060 TELETYPEWRITER TEST SCOPE, MEASURES BIAS AND DISTORTION OF START-STOP AND SYNCHRONOUS TELEGRAPH SIGNAL ON A 3" CRT. INPUT SPEEDS APPROX. 60 WPM (5 UNIT CODE), 60,75,100 WPM 7.42 CODE, AND BAUD SPEED EQUIVALENTS TO 60,75,100 WPM (10.42 UNIT CODE). INPUT IMP. 100 OHMS FOR 60MA NEUTRAL; 300 OHMS FOR 20MA NEUTRAL AND 30MA POLAR. MEASUREMENT RANGE 0-50% MARKING, OR SPACING BIAS AND DISTORTION. TUBES: 3RP1, 5651, 0A2, 3/12AT7, 6X4, 0B2, 3/5963, 5726. POWER REQUIRED 115/230V 60WZ. 8x8x15 SHPG. WT: 24 LBS. USED REPAIRABLE \$34.95 (FOUNDATION UNIT) LESS C.R. TUBE \$17.95



## ME-9 MULTIMETER

ME-9/TS-352 MULTIMETER, PORTABLE GENERAL PURPOSE VOM. 1000 OHMS/VOLT AC-DC SENSITIVITY OR 20,000 OHMS/V. SENS. DC ONLY. MEASURES AC-DC VOLTS FROM 2.5 TO 1000 V. IN SIX RANGES. DC AMPS FROM 250 U-AMPS TO 10 AMPS IN EIGHT SCALES; OHMS FROM 10 TO 100K. WITH 4" METER (FS=50 UA); JACK FOR 5000 VDC (20,000 OHMS/V.); AND TEST LEADS. REQUIRES THREE 4 1/2 VDC AND ONE 1/2 VDC BATTERIES (NOT AVAILABLE). SIZE: 11x8x6; SHPG. WT: 17 LBS. USED. PRICE: REPAIRABLE, \$29.95; CHECKED, \$39.95



## MULTI-PURPOSE TEST SET

AN/TRM-1 SIGNAL GENERATOR, covers 0.19-400 Mhz AM using two RF oscillators SG-32 (0.19-30 Mhz in 5-bands) and SG-33 (30-400 Mhz). Internal modulation 0-60% @ 1 KHz or 200-6000 Hz external. Output: 2.5 to 100K u-volts in nine steps; 50 ohm impedance. Built-in voltmeter measures 0-3-30-600 VDC, 0-3-30-300 VAC, and 0-10-100-1000 MW. Also tests performance of 3 to 100 watt transmitters over freq. range when proper coupler and dummy load (not included) is used. Write for availability/price of accessories. Requires 115 VAC 60 Hz. 18x13x8; 65 lbs. Shipped UPS in two cartons. Used, repairable \$135. Checked, \$225. MANUAL, partial repro., \$10.



## TEKTRONIX SCOPES



TEKTRONIX 545A OSCILLOSCOPE w/ Type CA DUAL-TRACE plug-in; DC to 30 Mhz mainframe (24 Mhz w/CA), sweep delay, two time bases, and 4x10 cm display. Sweep: 0.1 usec to 5 sec/cm in 24 calibrated steps, variable 12 sec/cm (Time Base A); 2 usec to 1 sec/cm in 18 calibrated steps (B). Delay 2 usec to 1 s in 18 calibrated steps. Amplitude calibrator 0.2 mv to 100 V p-p in 18-steps. 5X magnifier; usable with all "letter"-series TEK plug-ins. Requires 115/230 VAC. 17x13x24, 75 lbs. Used, repairable, \$295.00; Checked, \$375.00

TEKTRONIX 585A SCOPE, similar to 545A except DC to 85 Mhz response and includes Type 82 dual-trace plug-in. Used-repairable, \$365.00 Checked 585A mainframe w/reparable 82, \$435.

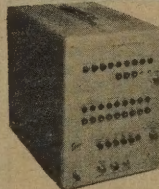
Other TEKTRONIX SCOPES; plug-in types priced without plug-in. All used-repairable.

TYPE 511AD 5 Hz to 10 Mhz, 85 lbs sh., \$70.  
RM15 DC to 15 Mhz single trace, \$165.00  
536 DC to 10 Mhz X-Y scope; requires two plug-ins, \$115.00  
543 DC to 30 Mhz single time base; X100 mag, plug-in type, \$175.00  
551 DUAL BEAM to 15 Mhz, uses two plug-ins; w/external supply, \$195.  
555 DUAL BEAM to 30 Mhz, w/sweep delay, Type 21 and 22 Time Base plug-ins and external power supply; requires vertical plug-ins, \$250.00  
RM561A compact rackmount scope w/2B67 time base and choice of 2A60 1 Mhz or 2263 300 KHz diff-plug-in, \$195.

TEKTRONIX TYPE 82 DUAL-TRACE SCOPE PLUG-IN, DC to 80 Mhz response for 580-series \$175.

TEK TYPE CA DUAL-TRACE, DC to 24 Mhz for 530, 540, and 550-series scopes, \$110.00

Other vertical amp plug-ins for Tektronix scopes and similar ones by other manufacturers. Add \$10 for units of Tektronix manufacture. All "used-repairable":  
TYPE C Dual-trace (Eickok only), \$90.00  
TYPE D, High-Gain, DC differential, \$25.00  
TEK TYPE M, Four-Trace, \$195.00  
TYPE G, Wide-band, DC differential, \$20.00  
TEK TYPE 53/54K, Fast-rise, \$45.00  
TYPE L, Fast-rise, high-gain, \$55.00  
TEK 2B67 Time Base for 560-Series, \$95.00  
TEK 10A2A DC-100 Mhz dual-trace 1/647 \$195.

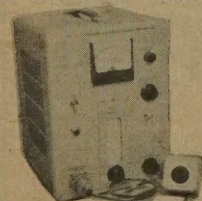


TEKTRONIX 180A TIME-MARK GENERATOR, 14 time-mark intervals from 1 u-sec to 5 seconds. Three sine wave freq: 5, 10, & 50 Mhz. Trigger rate freq: 1, 10, 100 Hz and 1, 10, 100 KHz. Power required: 115/230 VAC 50-60 Hz. Size: 13x10x16, 37 lbs sh. Used, repairable \$75 Used, checked, \$100.00

TEK 180 TIME-MARK, older square-cornered case version of above pictured unit, \$62.50

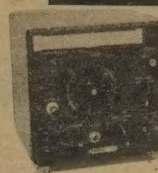
TEKTRONIX 105 SQUARE WAVE GENERATOR, 25 Hz to 1 Mhz directly readable on meter, \$65.00

TEK 107 SQUARE WAVE GENERATOR 400-1K Hz, \$50.  
TEK 160A POWER SUPPLY f/sequence rack, \$25.00  
TEK 161 PULSE GENERATOR module, \$25.00  
TEK 162 WAVEFORM GENERATOR module, \$25.00  
TEK 163 FAST-RISE PULSE GENERATOR module, \$25  
TEK 161 TIME-MARK GENERATOR, 1-10-100-1000-10K usec plus 10 Mhz sine wave, \$60.00



TEKTRONIX 190A CONSTANT-AMPLITUDE SIGNAL GENERATOR with 190A attenuator unit; produces sine waves at constant amplitude in the 350 KHz to 50 Mhz range. Six bands; output continuously variable over entire range. Also 50 KHz position variable over narrow band. Output amplitude variable from 40 mv to 10 v peak-to-peak. 190A attenuator attenuates 0.1, 0.25, 0.5, 1, 2.5, 5, and 10 at nominal impedance of 52 ohms. Requires 115/230 VAC 50-400 Hz. 9x13x11; 30 lbs sh wt. Used-repairable \$145 \$125. Checked \$165 \$145.

## LM FREQUENCY METER



LM FREQUENCY METER, crystal calibrated unit covers 125 to 20,000 KHz in two bands. Design accuracy better than 0.03%. Output 250 uv minimum; 600 ohm impedance. 40% AM modulation at 500 Hz. With calibration book, 1000 KHz crystal, and tubes 6A7, 76, 77, 2/991. Requires 12 V 600 ma AC, 260-475 VDC 20 ma. 8x8x8 1/2, 14 lbs sh wt. Gov't-reconditioned, \$24.95; MANUAL, \$7.50 w/set. Power input connector for meter, \$3.00

## SIGNAL GENERATORS

AN/URM-25 SIGNAL GENERATOR, older version of URM-25F, 10 KHz-50 Mhz AM in nine bands. Output 0-100K uv in to 50 ohms. Modulation 0-50% 400 or 1000 Hz internal. One Mhz crystal calibrator. Requires 115 VAC 50-1000 Hz. Less front cover; 11x14x10 1/2, 44 lbs sh. Used, repairable, \$85. Checked, \$130. ACCESSORIES available w/purchase of URM-25: MK-1487 impedance adptr \$6. MANUAL, \$10. SM-35 antenna simulator, \$5. CN-223 5:1 attenuator \$5. CN-224 10:1. \$6. \*\*\*\*\*



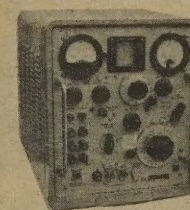
## 3 TO 405 MHZ

AN/URM-26 SIGNAL GENERATOR, older version of URM-26B, 3-405 Mhz AM-CW in six bands; output 0.1 to 50K uv into 50 ohms. 0-50% internal modulation, 400 or 1000 Hz. Requires 115 VAC 50-1000 Hz. 11x15x10 1/2, 42 lbs sh wt. Used, repairable, \$90.00; Checked, \$135.00 MANUAL, partial reproduction, \$10.00 CN-179 10:1 or MX-1289 adapter, \$7.50 each.

PLUG-INS FOR HP-524 AND SIMILAR COUNTERS. USED, REP. ADD \$10 FOR HP MFG. MX-1637 10-100 Mhz, \$35. CV-594 100-220 Mhz, \$25. HP-525C 100-500 Mhz, \$125. HP-526A VIDEO AMP, \$40. MX-1636 TIME INTERVAL, \$25.00 HP-526C PERIOD MULTIPLIER, \$40.00 TRANSIT CASES F/525-526 PLUG-INS. STEEL (11x8x8), \$5.00. FIBERGLASS (14x9x9), \$10.00



## TS-510A SIGNAL GENERATOR



TS-510A/USM-44A SIGNAL GENERATOR, 10 to 420 Mhz AM, CW, and pulsed carrier. Internal modulation 400 or 1000 Hz. External mod: 100 Hz to 20 KHz. Output: 0.1 volt to 0.5 volt into a 50 ohm load. Large 3 1/2" round meters indicate Percent Modulation and Output Volts-DBM. With built-in 1 Mhz and 5 Mhz crystal calibrator. Similar to Hewlett-Packard 608D. Power required: 115/230 VAC 50-1000 Hz. 13x16x21, 80 lbs. Used, repairable with output, \$245 \$10 \$195. \*\*\*\*\* MANUAL for TS-510A, partial reproduction \$10.

## 4 TO 405 MHZ GENERATOR

SG-117/URM-26B SIGNAL GENERATOR, 4.0 to 405.0 Mhz AM-CW-pulse in six bands. Compact unit has 0.1 to 100K u-volt output @ 50 ohms. Modulation 400 or 1000 Hz 0-50%. External pulse-mod requires positive 40 V min., 50-5000 pps; duration 2-40 u-sec and 70 ohm input impedance. Requires 115 VAC 50-1000 Hz. 11x14 x10 1/2, 36 lbs sh wt. Used, repairable, \$175.00 Checked, \$225.00; Manual, partial repro. \$10. ACCESSORIES sold only w/purchase of URM-26B: CN-315 2:1 attenuator, 50 ohms, \$6.00 CN-316 10:1 50A \$7.50 CN-471 10:1 70A \$8. CU-439 impedance matcher, \$7.50 RNC cords, 4 ft, \$1.25; 6", \$1.00





# TAKE 40% OFF PRICES IN THIS COLUMN

## PRINTER MECHANISM

**MATRIX PRINTER MECHANISM**, precision German-made mechanism used in a U.S. assembled matrix printer which had speeds up to 180 CPS bidirectional, 0-132 or 0-158 columns. Includes single platen, ribbon drive, motors, belts, paper guides, etc. In 26"wx8 1/2"Hx20"D beige plastic case with cast-aluminum base. Cover lifts for easy access. Add your own control/interface electronics and print heads and make it operational. 75 lbs sh wt. #MPM/MI2, unused, \$79.50

#MPM-2P/MI2 MECHANISM, same as above except with dual platen; 80 lbs sh. Unused, \$130.00



**MI2 DESIGN 2400 MATRIX PRINTER**, 180 cps bidirectional; 0-132 or 0-158 columns, 96 character set plus elongated print feature. Units are sold "AS-IS, repairs required/no documentation." 175 lbs sh. Used, as-is, \$400.00; As-is, less printhead, \$300.00

**PRINTER EXERCISER** for the above printer; selectable baud rates from 50 to 9600. Uses 8080A, 8255A, 8251, 8224, 8226, & 4/2708's. In transit case; 8 lbs sh. \$100.00

**PRINTER STAND** only as shown above; 25"H, 13" x24" support for attaching desk top. 38 lbs; bus or truck shipped only. #PSD/MI2 used \$25.

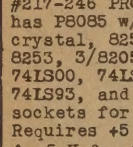
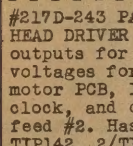


## MECHANISM PC BOARDS

#217D-242 CARRIAGE-RIBBON MOTOR DRIVER BOARD, provided outputs for red/blk ribbon solenoid, ribbon motors, and carriage as well as voltages for Processor, Controller, and RAM PCB's. Has power transistors 6/TIP142, 3/TIP-140, 3/TIP145, 2/TIP2955, 2/LM320T-12, 2N3055, etc and 74-series IC's; -40 -5 -9 VDC req. With pin-outs, \$16.95

#217D-243 PAPER FEED #1/ HEAD DRIVER PCB, provides outputs for printhead needles, voltages for carriage/ribbon motor PCB, I/O for optical clock, and output to paper feed #2. Has transistors 13/TIP142, 2/TIP145, 2N3055, 4/MPL455P IC's, and 16/74-series IC's. Requires +40, +9, +5 VDC; 8x8x8. w/pin-out \$16. \*\*\*\*\*

#217-246 PROCESSOR CPU, has P8085 w/5.185 Mhz crystal, 8255A, 8212, 8253, 3/8205, 4/2114 RAM, 74LS00, 74LS02, 74LS32, 74LS93, and 74LS244. Also sockets for 4/2708 EPROM. Requires +5 VDC (plus +12 & -5 V for 2708's). 10x7; w/pinouts, \$60.00

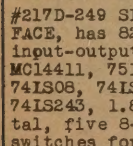


## PRINTER INTERFACE PCB

\*\*\*\*\*

#217E-238 PROGRAMMABLE INTERFACE, has 8080A microprocessor, 8251 programmable communications interface, 2/8255 programmable peripheral interface, 8224 clock generator, 8228 controller, 3/8205 decoders, MC14411 baud rate generator, 4/2111-4 256x4 RAM, 4/4804 1024x4 RAM, 74123, 74196, and 74LS04. Also four 8-place DIP switches for baud rates 75-110-134.5-150-200-300-600-1200-1800-2400-3600-4800-7200-9600 and sockets for 2/2708 EPROM. Provisions for additional 2/2708, 4/4804, 8251, and secondary transmit-receive components. Requires -9 and +5 VDC; 7 1/2x10 1/2. With pin-out, \$65.

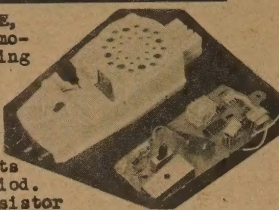
#217D-249 SERIAL INTERFACE, has 8212 8-bit input-output port, 8251, MC14411, 75188, 75189, 74LS08, 74LS10, two 74LS245, 1.8432 Mhz crystal, five 8-place DIP switches for baud select as on #217E-238 interface. Provision secondary xmit-receive components. -12 -5 VDC 4 1/2x7. W/pin-outs \$21.



## 'SPACE TOY' MODULE

**SPACE WARRIOR MODULE**, electronic toy with motor speed and shooting sound effects with flashing LED's. Firing of infra-red LED is detected on aggressor module causing "hit" effects and an inactive period. Requires 9 VDC transistor battery. Sold AS-IS, may have cold solder joints or other problem. 6 1/2x2 1/2x1 1/2 2 lbs sh. #SPW-MOD, \$3.95 each; 2 for \$6.50

**CIRCUIT BOARD** only from above module, AS-IS; #SPW-PCB, \$2.50 each or 3 for \$6.00



## WHISTLE/SOUND ACTIVATED

**WHISTLE/SOUND ACTIVATED SWITCH**, alternates on-off latching operation. Can be used to control lights, TV commercials, robots, etc. Ten transistors; 2 1/2x3-1/8 circuit board with microphone and schematic. #AST-968S3, \$2.50 each.

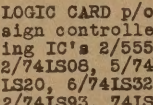


## TIME-TEMP SIGN PCB'S

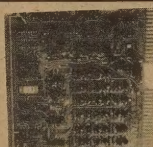
**SCR/TRIAC CONTROLLER BOARD** with seven each 400 V 4 A SCR's and 200 V 6 A triacs. SCR's trigger the triac gates with a 50 m-sec 16 V pulse that holds all triggered triacs "on" until 24 VDC to SCR's is reset. Originally p/o time-temp sign. 6x6 1/2, 1 lb. #ASI-CMC27, w/schematic \$5.50



**TRIAC CONTROLLER BOARD** w/ eight RCA 200 V 6 A triacs (TO-66), isolation/trigger transformer, shift register, and gates which control each triac. P/o time-temp sign. With schematic and 22-pin edge connector. 4 1/2x8 1/2, 2 lbs. #ASI-CCM107 \$5.95



**LOGIC CARD** p/o time-temp sign controller containing IC's 2/555, 74LS00, 2/74LS08, 5/74LS14, 74LS20, 6/74LS32, 2/74LS42, 2/74LS93, 74LS123, 74LS237, 74LS367, 7404, 7417, and DS8830. With schematic. 9-3/8x5 1/2x8, 1 lbs sh. #ASI-503/00, \$3.95

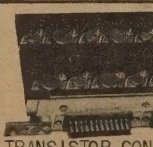


**MICROPROCESSOR CIRCUIT BOARD**, has C4004 P-channel microprocessor, 4/P4001 256x8-bit PROM, 2/P4002-1 320-bit RAM and 4-bit output port, 3/4003 10-bit serial in/parallel-serial out shift register, plus 53 transistors. #IC-07, \$3.50



## VARACTOR

**TV TUNER** for channels 2 thru 83; output into 75 ohm termination, 20 mv-rms min. Tuning voltage 0.4 to 30 VDC; 300 or 75 ohm antenna input. Sylvania mfg; with pinout info. 3 1/2x1 1/2x5, 1 lb. #1052BDB3B, unused, \$14.95



**CONTROL ASSEMBLIES** ON 9x4 HEATSINK. USED, EXCELLENT YIELD ON SEMI CONDUCTORS. SHPG WT. 4 LBS EA. SIMILAR TO PICTURE ORDER BY NUMBER

**TRANSISTOR CONTROL ASSEMBLY WITH DIODES.**

8/TO-3 60V (SIMILAR TO 2N3055) AND 8/TO-66 (SIMILAR TO 2N3054) 60V TRANSISTORS, 8/0.4 OHM 5W AND 8/30OHM 3W RESISTORS, 8/DO-4 DIODES WITH INSULATED MOUNTING HARDWARE. #7729 \$4.00

**TRANSISTOR CONTROL ASSEMBLY**, CONTAINS 8/TO-3 AND 8/TO-66 AND EMITTER RESISTORS AS ABOVE. SMALL DIODES AND RESISTORS #0425 \$3.50

**CONTROL CLUTCH ASSEMBLY** AND HEATSINK 9x4 IN. 8/100V TO-3 AND 2/60V TO-66 TRANSISTORS. FIVE 0.4 OHM 10 W RESISTORS, MORE.#095-8139 \$2.50

## PAPER TAPE READER

**TALLY PAPER TAPE READER/TRANSMITTER**, consists of oscillator, receiver, logic, and power supply cards. Uses standard one inch paper tape; selectable 5 or 8 channels, A or U mode. Output can be set to 0,-3,-6,-9,-12 dbm. No specific data but believe this to be 300 baud. Requires 115 VAC 60 Hz. Size: 9-5/8x12x4 1/2, 11 lbs sh. #PTR-760-328, used, \$14.95

#760-128 TALLY PAPER TAPE READER, similar to above; no selectable output, 100 baud. \$8.95



## 73-KEY KEYBOARD

**CHERRY 73-KEY KEYBOARD** #B65-59AB or equal. Standard typewriter keys, 0-9 key pad, Enter, Period, Comma. No electronics on keyboard. Keys can be unsoldered for replacement. Boards are little used in good condition. 15 1/2x6 1/2x1 1/2, 3 lbs sh. #COM-B65-59AB, complete as pictured, \$22.00

#SPA-B65-59AB, as above but no space bar \$12.

#MIS-B65-59AB, " " " " " " and missing 4 to 6 key switches, \$9.00

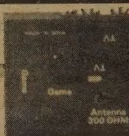
#PAR-B65-59AB, missing at least 10 key switches; suitable for parts only, \$6 2/10



## TV GAME SWITCHES

**TV GAME SWITCH** as used on many TV video games; 300 ohms, RCA jack, 4" twin lead. 2 1/2x1 1/2x1, 1 lb. #TW-TVGS, \$1.95

**SHIELDED TV GAME SWITCH**, "Game" RCA jack input is shielded from TV inputs; 300 ohms. 2 1/2x3x1 box also has two screw terminals. Other uses possible. #JA-TVGS, \$2.95



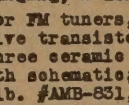
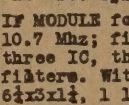
## H-K FM TUNERS

**HARMON KARDON FM TUNERS** with AM capacitors (no AM component) 75 ohm antenna, and 300 ohm IF jacks; 1" dia tune shafts. With diagram, NEW. #00331591A, two MOSFET RF stages, MOSFET mixer, two transistor oscillator; 3:1 gear reduction. Requires 13 VDC; 4 1/2x2 1/2. \$9.95

#00234339 (Alps), two MOSFET RF stages, MOSFET mixer, IC oscillator; 3-gear variable capacitor; 3:1 gear reduction. 5 1/2x2 1/2x3 1/2. \$7.95

#B113UL3 (Alps), one FET, two transistor oscillator; requires -12 VDC. 3 1/2x2 1/2x2 1/2, 2 lbs sh. \$4.95

**IF MODULE** for FM tuners, 10.7 Mhz; five transistor, three IC, three ceramic filters. With schematic; 6 1/2x3 1/2, 1 lb. #AMB-831, \$9.00



## PRINTER LOGIC BOARD

**PRINTER LOGIC PC BOARD** with over 100 each 74-series IC's, sockets, and tantalum capacitors --plus C8008 CPU, 8/2102 RAM, 10/1702 PROM, six 3341 FIFO, AY5-1013 UART etc. Part of matrix printer; w/pin-out. 20 1/2x14. #217E-224, \$35.





# TAKE 30% OFF TOTAL PRICE WHEN YOU BUY ANY 4 CIRCUIT BOARDS BELOW

**ON SALE!**

**CPU'S**

**RAM'S**

**TAKE 30% OFF**

8085 CPU, \$9.95  
8212 8-bit I/O 1.75  
8251 programmer 5.95  
2111 RAM \$3. 4/\$10.  
4804A RAM \$5. 4/\$10.  
AY5-1013 UART, 4.00  
FRI-502E02 FIFO 6.95  
RC4558 dual op-amp 50¢

8080A CPU, \$4.95  
8205 decoder, 2.00  
8255 control, 4.50  
8255 programmer 4.95  
2114 RAM \$4.95 4/\$17.  
MC14411 baud gen \$9.  
3341 FIFO, \$4.00  
MC1469 quad-line, \$1.  
LM703 RF-IF amp 3/\$1.  
LM7031 CdSe photo 2/\$1  
FPA103 light reflective transducer, \$1.25

CMOS IC's, good pull-outs w/'79 date codes:  
4060BE 2/\$1.  
LM-340T-12 w/heatsink, \$1.50

**EDITOR KEYBOARD**

WORD PROCESSOR KEYBOARD, 93- keys including: qwerty format and function keys "Help, Move Text, Emph Add, Search, Save, Indent Set, Set Tabs, Setup, Cancel, Enter, Options, Quick List, Command, Msg Get, Back Erase, Skip Back, Prev Page, Next Page, Recall Page, Store Page, Skip Forward," etc. IC's 741314, 22-950-3B, 22-908-03, P8021H; 3.57945 Mhz crystal, Almond color keys; Keytronic mfg. 5 1/2x19 1/2, 5 lbs. #A65-02181/3767 NEW \$29.50

POWER SUPPLY REGULATOR BOARD, 2/3401 quad op-amps, 5/741 op-amps, 3/2N5958, 8/2N2222, 4/2N2906, 2N3054, etc. 2 lbs. #PSR32-A1, \$2.50

RECTIFIER SCR BOARD with 3/GM122F 50 V 6 amp SCR; 13/1N5402 200 V 3 A; 6/0.39 ohm 5 W and 5 ohm 25 W resistors, etc. #PSR32-A2, \$2.25

12-DIGIT FLUORESCENT DISPLAY using DG-10A 1-5/16"H tubes with 5/16"H display; 21 transistors, two IC's, capacitors, resistors, etc. 22-contacts on 5 1/2x3-3/8 board. #QP-3304 \$3.95

FAIRCHILD IC'S: 4/9002, 2/9015, 2/9016, 74180 3/9024, 2/9602, 9/2N2222 plus resistors, diodes, etc. 2 lbs. sh. #C200504G1, \$1.95

TALLY OSCILLATOR, ferrite coils 81.9-72.5-44.7-42.9-35.6-34.9-30.2 mHz, \$9/50 V capacitors .001 to .47 mf, 9/2N3565, 2N3643. \$2.95

MPS6513 equivalent (Motorola w/0139 house #)  
NPN RF transistor; 30 V, to 330 Mhz. 6/\$1.  
MPSA14 NPN darl 5/\$1. 2N3055 NPN 10 A, 75¢  
2N2222A NPN 6/\$2. 2N4126 PNP 10-no 6/\$1  
2N6346 unijunct 75¢ TIP120 NPN darl. 75¢  
TIP140 NPN darl. 95¢ TIP142 NPN darl. \$1.00  
TIP145 PNP darl \$1.00 7808 8 v reg., 3/\$1.

CORTRON KEYBOARD with ferrite core key switches. Has standard 54-key typewriter format, 12-key numeric pad, and 17 entry keys (4 unmarked). Butterscotch-brown and beige keys; looks like serial input. With IC's 2/7403, 7405, 74155, 4/74145, 743287, 3/74LS00, LS02, 2/LS04, 2/LS10, LS08, LS11, LS14, LS20, 4/LS74, 2/LS93, CA3086, MC833P, and 80-551276 controller. Requires +5 and -12 VDC; No further info. 6 1/2x18 1/2, 4 lbs. #55-500168 NEW, \$21.95

TWELVE DIGIT FLUORESCENT DISPLAY #POS2, 3/8" DIGITS WITH CHARACTERS 0 THRU 9, -, ., AND DECIMAL POINT. TUBES ABOUT 2" HIGH. ALSO 2/M5812 COUNTER IC'S, 27 TRANSISTORS, AND OTHER PARTS. 9x8 1/2x2 1/2, SHPG. WT: 4 LBS. \$6.95

DIODE MATRIX 34 X 20 CONTAINS 90 DIODES 1N4004 OR EQUAL. 6x11 #005330 \$3.95

DIODE MATRIX 25 X 7, 23 TRANSISTORS, DIODES WITH 22 PIN SOCKET. 7x4 1/2, #2010200

CORE MEMORY ARRAY 2 SECTIONS EACH 52 X 52 BOARD SIZE 13x13x1 1/2 #2162301 5 LB \$3.95

1 AMP 50 PIV 20/\$1. 35 AMP 50 PIV \$1.80  
400 PIV 15/\$1. 100 " 2.10  
1000 PIV 10/\$1. 600 " 3.50

5 AMP 600 PIV, \$1.75 1N3890 100V 12A 4/\$3.  
MR-series, 6 AMP ZENERS, 1 W: 3.3 3.9  
MR750 50 PIV 85¢ 4.1 10.2 V 4/\$1.  
MR751 100 " 95¢ 11.6 12.0 V 3/\$1.  
MR752 200 " \$1.10 1N2974B, 10 W 10 V  
MR754 400 " 1.25 5¢ stud mt. \$1.25

1N1357RA ZENER, 10 W 18 V 5% rev-polarity \$1.  
VARO VTA200/S 200 V 25 amp bridge rectifier, c.t. cathode, stud mount, \$1.00 ea. 4/\$3.  
#50-100A RECTIFIER, 50 V 100 A conservative; no hardware or pigtail. House #; 2x1". \$2.  
GE#A70EKL13, 200 PIV 100 A, no hardware \$3.50

KEYTRONICS KEYBOARD with standard 54-key typewriter format and 12-entry keys. Keys are grey and blue; no electronic. 5 1/2x18, 3 lbs. #A65-01684, NEW, \$18.95

ENDORSOR DRIVER 4/DM8851 DUAL RETRIGGERABLE MVBR, 7474, 9109 HIGH VOLTAGE HEX INVERTER, 2/7400, 7420, 7406, 18 BYPASS CAPACITORS. TO-3 TRANSISTOR ETC 1 LB #484-0001801 \$1.50

INDUCTOR BOARD, has 3/200 uH and 2/1200 uH inductors 1 1/2"H x 1-3/8" dia; also 3/4000 mf 20V 3/3000 mf 25 V axial capacitor 2N5039, 2N2219, 1N339, 1741. 3 lbs sh wt. #54-014535, \$2.95

**LED'S**

RED, T-1 1/2 size 8/\$1. GREEN 6/\$1.  
DARK RED, HP5082-4697, 6/\$1.00  
7-SEGMENT NUMERIC DISPLAY, common anode, left hand decimal HP5082-7730 \$1.  
SLA-2 DISPLAY, .33", - or -1 and 1, 2/\$1.00

CORTRON 110-KEY MULTI-FUNCTION KEYBOARD with qwerty format, 13-key numeric pad, cursor control keys, and 31 function keys: "Delete, Insert, Erase, Xmit, Xfer, Print, Kboard Unlock, Control Page, Tab Set, FCC Clear/Search FCC Renewable/Status, FCC Generate/Mag Wait, Hang Up," and others. IC's CD4051, LK93, 74LS00, 74265, CD4028, MC14028, P8048H; 6.00 Mhz crystal. May have one or two keys tagged "reject." 7 1/2x19 1/2, 5 lbs. #2893916, \$19.95

CMOS #84293; 3/4001, 2/4002, 5/4009, 2/4010 4/4011, 2/4012, 7/4013, 4021, 2/4022, 7/4023 2/4025, 2513 A 64x8x5 CHARACTER GENERATOR 7417. 9x7 1/2, SH WT 2 LBS #84293 \$7.50

**IC SOCKETS**

8-pin low-profile 5/\$1.  
14-pin wire wrap 6/\$2.  
14-pin standard 5/\$1.

16-pin std. 4/\$1. 16-pin l.p. 5/\$1.  
18-pin l.p. 4/\$1. 20-pin l.p. 35¢ 3/\$1.  
22-pin l.p. 3/\$1. 24-pin l.p. 40¢ 3/\$1.  
24-pin std. 50¢ 28-pin l.p. 45¢ 5/\$2.  
28-pin std. 60¢ 40-pin std. \$1.00

DIODE w/BUILT-IN HEATSINK, approx 100 V 50 amp; 2 1/2 x 2 1/2 dia plus pigtail. Removed f/equipment. #K319404, \$2.50

GENERAL INSTRUMENT FULL-WAVE RECTIFIER BRIDGES, new: #KEPC25-02, 25 amp 200 V, \$2.25  
#KEPC6005, 6 amp 50 V, \$1.25

CMOS-K1; 6/4008, 4/4009, 4/4011, 2/4012 7/4013, 9/4016, 5/4022, 2/4023, 4024, 5/4040 9x7 1/2, SH. WT. 2 LBS #CMOS 84292 \$6.95

CMOS #14007; 4/4001, 2/4011, 2/4013, 4042, 4558 DUAL OP-AMP, 23 TRANSISTORS, MANY RESIS TORS, CAPACITORS. 1 LB #14007 \$2.95

**JUMPERS**

PCB jumpers, unused.  
#50-14P2; two 14-pin, 18" long, \$2.50 1.75  
43-16P1; one 16-pin, 12" " 1.50 3/\$3.  
44-16P2; two 16-pin, 48" " 2.40  
43-24P1; one 24-pin, 12" " 2.00 1.50  
60-24P2; two 24-pin, 22" " 2.50 1.75

44-40P2; two 40-pin, 23" " 3.25  
9-14P1; one 14-p, 23" loose leads, \$1.75

PC BOARD JUMPERS with IC plug and DP25P, 16": 16-pin, #16/DP25P \$4. 24-pin, #24/DP25P, \$5.

JOYSTICK

HIGH-QUALITY JOYSTICK with removable center return springs. Uses two Bourn 5K ohm pots with trim adjustments for position centering. 1-3/8"H stem above panel surface; 1 1/2" depth required behind. O/a approx 2 1/2 x 2 1/2, 1 lb. #JS-14227 NEW \$7.

IC BOARD #595254; 3/9322 QUAD 2 INPUT MULTIPLEXER, 7402, 7404, 7406, 7410, 3/7438, 741, 7442. 1 LB #595254 \$1.95

TEXAS INSTRUMENTS SEMICONDUCTOR MEMORY DATA BOOK (1975), 272 pages, \$1.00

REED RELAY

REED RELAY BOARDS LISTED BELOW CONTAIN 12VDC REED RELAYS AND ASSOCIATED COMPONENTS. ORDER BY BOARD NUMBER. SH WT. 3 LBS.

#5336 1/DPST, 4/5PST, 2/4PST, mercury wetted relay SPDT, 26 diodes. \$3.95

#5346 12/SPST, DPST, 2/DPST mercury wetted. 5 transistors, 51 diodes, capacitors 3/25 mf 50 V and 1/47 mf 35 V. \$5.95

#5361 3/DPST, 4/SPST, mercury wetted SPDT, 6 transistors, 24 diodes, and misc capacitors and resistors. \$3.95

#315D339 Eight Clare HGSM 7004 mercury wetted relays on board, \$3.95

**COPPERCLAD PCB**

Single-side copperclad etching board for making printed circuits. Phenolic (PH) or fiberglass (FIB) backed as noted. Some drilled (d).

PH# Size Price Size Price Size Price  
4x18 \$7.5 11x16(d) \$2. 16x18 \$2.75  
FIB# 12x25 (d) \$3.50

VERY THIN COPPERCLAD, less than half thickness of above; easily flexed to make cylinders, RF shield, or laminates; fiberglass core. Single-sided (SS) or double-sided (DS).

Size Th Price Size Th Price  
#VTC-33 14x18 .019" \$1.75 18x24 .015" \$2.25  
#VTC-DS 22x28 .006" 2.50

BUY 5 or more one type, take 20% off price.

**KEYBOARD ENCLOSURE**

KEYBOARD ENCLOSURE for 75-key format including separate numeric pad; unpainted, unassembled. 2 1/2x20x7 1/2, 4 lbs. #KNC-KBD, \$14.95

**VARACTOR**

TV TUNER for channels 2 thru 83; output into 75 oh termination, 20 mv-rms min. Tuning voltage 0.4 to 30 VDC; 300 or 75 oh antenna input. Sylvania mfg; with pinout info. 3 1/2x1 1/2x5, 1 lb. #1052BD3B, unused, \$14.95

**MEMORY PCB**

Commercially designed PC boards w/position info; less components.

#217-248 6K EPROM BOARD for six 2708 EPROM; with 24-pin socket and connector, \$6.00

#217D-101 EPROM BOARD for eight 1702A EPROM, 4/7404, 2/3404; with edge connector, \$2.40

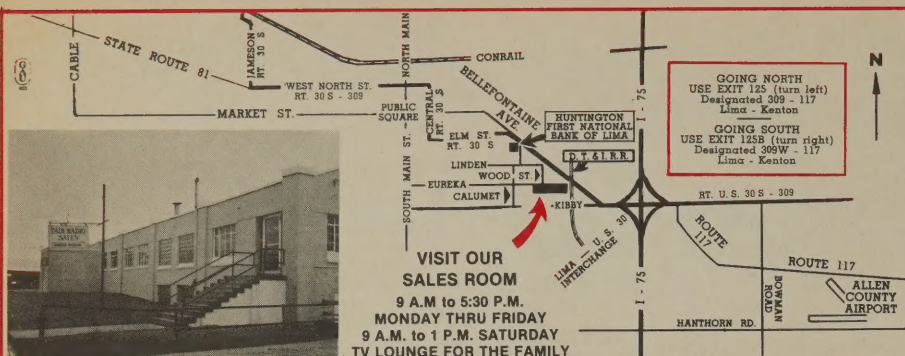
#217D-136 2K RAM BOARD for sixteen 2102 RAM, 4/7404, 7420; with edge connector, \$3.00



*Fair Radio Sales Co., Inc.*  
 1016 E. EUREKA ST.  
 Lima, Ohio 45802  
 P. O. BOX 1105

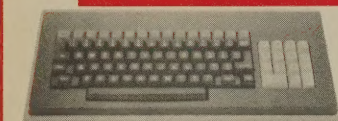


**GOD IS JUST  
 A PRAYER AWAY**



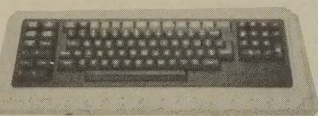
**VISIT OUR  
 SALES ROOM**  
 9 A.M. to 5:30 P.M.  
 MONDAY THRU FRIDAY  
 9 A.M. to 1 P.M. SATURDAY  
 TV LOUNGE FOR THE FAMILY

## SPERRY KEYBOARDS

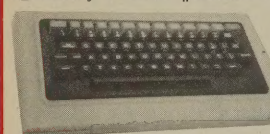


84-KEY MICRO-SWITCH KEYBOARD, standard and qwerty format with 13-key numeric keypad; 15 red control keys. IC's SW-10667 MC836P, SW-20339K controller. Grey keys and case; 7 $\frac{1}{2}$  x 17 $\frac{1}{2}$  x 2 $\frac{1}{2}$  4 lb. #84-SD12-14 used \$27.95 #8120302, same as #84-SD12-14 except with Japanese KANA symbol characters; NEW \$39.95

94-KEY MICRO-SWITCH KEYBOARD with case, standard and qwerty keys plus numeric pad and control keys Display ERASE to EOF, EOD ERASE EOL, In Disp DELETE in Line, In Disp INSERT in Line, Cursor to Home, SOE, Insert LINE Delete, Line Dup, Break, Ctl Page Unlock Here Is, Xmit, and other functions. Has 3' cord terminated in DEC-93 connector, IC's 74H04, 74154, SD23593, crystal 5.904 Mhz Black and blue keys in beige plastic case. 8 $\frac{1}{2}$  x 21 x 3, 8 lbs. #2889906, unused, \$34.95

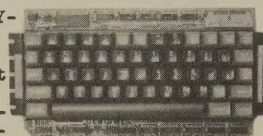


74-KEY MICROSWITCH KEYBOARD, similar to above except more compact and without numeric pad; 13 function keys. ICs 74H04, 7442, and SD-23093M; 5.904 Mhz crystal. 3' cord w/DEC93 8 $\frac{1}{2}$  x 15 x 3, 5 lbs. #2825479, NEW, \$24.95



SD-23093M; 5.904 Mhz crystal. 3' cord w/DEC93 8 $\frac{1}{2}$  x 15 x 3, 5 lbs. #2825479, NEW, \$24.95

CORTRON EUROPEAN KEYBOARD, compact size has standard qwerty letters plus "umlaut" Å, Ö, Ü; numerical keys assigned to "U-I-O-J-K-L-M,-,." locations. Also function keys Numeric, Alpha, Repeat, Reset, LCA, Delete-Skip, Disp/Auto Off, Field Rel, Char, Field, Rec, Bypass/Prog, Cmd/Rel, Insert/Dup, V Cor/Ax Dup, Hex, and other symbols. Grey alpha, black numeric, blue control keys. IC's 1455, DM933, CA3086, 7493, 74145, 74LS00-02-04-08-11-74, and 80-551276 controller. No further info. 6 x 12 x 1 $\frac{1}{2}$ , 4 lbs. #55-500501/2683 NEW \$17.95



TV-2 DYNAMIC MUTUAL CONDUCTANCE TUBE TESTER, checks most military and older commercial receiving and low power transmitting tubes. Test sockets for 4, 5, 6, 7-pin, 7- and 9-pin miniature, loctal, octal, acorn, sub-mini flat and round tube bases. Measures mutual conductance, emission, gas, noise, and shorts. Meters for filament, grid, plate, screen, signal, and transconductance (percent quality). Theoretical-ly, a tube not listed on the roll data chart can be tested by setting the proper voltages on the meters provided those voltages are known. Requires 115 VAC 50-1000 Hz. 17 $\frac{1}{2}$  x 16 $\frac{1}{2}$ , 50 lbs sh wt. Used-reparable \$75 \$59.50 Checked, \$110.00 \$95.00

MANUAL, partial reproduction, \$10.00



MANUAL, partial reproduction, \$10.00

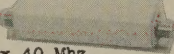
## KEY ALARM PANEL



ALARM CONTROL PANEL w/5-position key lock wafer switch, SC628 Sonalert® 6-28 V 3-14 ma, and five panel lights. 11 $\frac{1}{2}$  x 4 x 8, 2 lbs sh. #ALRM-SC628, used w/key, \$8.95

## 100 WATT LOW PASS

100 WATT LOW PASS FILTER for commercial transceivers; sharp cut-off approx 40 Mhz. 6 $\frac{1}{2}$  x 2 x 1 $\frac{1}{2}$  aluminum box with two SO239 connectors. #LFP-40M, NEW, \$6.95



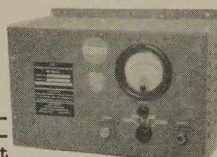
## 50K JOYSTICK



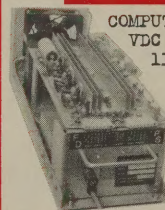
JOYSTICK with four 50K ohm potentiometers having fixed center-taps; smooth ball action. Brushed aluminum handle; 2 $\frac{1}{2}$  x 2 $\frac{1}{2}$  x 2 $\frac{1}{2}$ . #JS-50K-LIB NEW \$5.95

## SWR POWER METER

ME-165/G STANDING WAVE-RATIO POWER METER, designed for use with 400 watt HF transmitters; full meter scale of 600 watts. SWR references on meter of 1.5-2-3-4; function switch Power-Adjust-SWR-Operate. Type N input and output connections. Flanged on back for wall mounting. 13 $\frac{1}{2}$  x 9 $\frac{1}{2}$  x 9 $\frac{1}{2}$ , 18 lbs. Used \$49.50



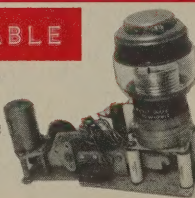
## COMPUTER SUPPLIES



COMPUTER POWER SUPPLY, outputs +5 VDC 15 amps and  $\pm$ 12 V 1 A from 115 VAC 60 Hz input. Uses IC regulator to drive 2N3055; also LED status indicators, 4 $\frac{1}{2}$ " axial fan, and cover. 6 x 6 x 19 30 lbs. #MA-2149, used \$19.95 #FD-2266 DISK DRIVE SUPPLY as above but +5 V 5 A, +24 V 5 A, -5 V 1 A; Wilton mfg. \$24.95

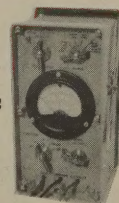
## VACUUM VARIABLE

RF VACUUM VARIABLE CAPACITOR ASSEMBLY, consists of 7-970 pf 3 KV vacuum variable capacitor with 28 VDC drive motor and gear assy. Will run on 8 VDC and up. #C501/18013, used, \$75.00



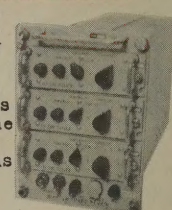
## VOLT-OHMMETER

TS-618/PRM-15 VOLT-OHMMETER, rugged portable VOM with full scale ranges 2.5-10-25-100-250-1000 VDC and RX1 X10 X100 X1K X10K X100K ohms. Has 3 $\frac{1}{2}$ " rd meter, battery self-test, test leads, schematic w/info. Requires 3 "D" cells and -21 & +24 V source. Batteries not available. 8 $\frac{1}{2}$  x 4 $\frac{1}{2}$  x 5, 8 lbs. Repairable, \$19.95

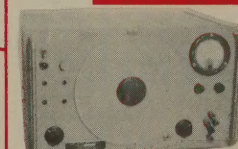


## HF TUNED RECEIVER

R-1440/WLR-6 HF TUNED RECEIVER, solid-state unit operating over 1.5-19.0 Mhz AM-CW on 36 crystal-controlled channels; uses three plug-in band modules with 12 channels each to cover portions of the range. Each module is fully enclosed and shielded and has 12 adjustable antenna circuits, 12 adjustable RF amp circuits, crystal oscillator (uses CR-18 crystals - not available), mixer, 455 Khz IF with Cleveite filter, detector, AGC, BFO; controls for BFO, RF Gain, AM/AGC-AM/Man-CW, Channel select. Mainframe which holds three modules, serves as 115 VAC 60 Hz power supply and audio amp; has Volume, Band select 600 ohm Audio jack. Band modules available: Band 1 (1.5-3.5 Mhz) Band 2 (2.3-5.1 Mhz) 3 (3.4-7.2 Mhz) 4 (5.2-11.8 Mhz) 5 (7.9-19.0 Mhz). Our tests have found that the modules can be operated as independent receivers on 12 VDC input and with addition of an audio amp. Also sensitivity less than 1 microvolt and that modules may be tuned over broader range than specified band limits. No further info. We will ship three different modules of your choice with each mainframe; please specify your second choice. 8 $\frac{1}{2}$  x 6 $\frac{1}{2}$  x 16 $\frac{1}{2}$ , 23 lbs sh. Used-reparable, \$175.



## TEST OSCILLATOR



SG-71/FCC CARRIER TEST OSCILLATOR, similar to Hewlett-Packard 233A and used to check carrier current systems; 50 Hz to 500 Khz in four bands. High power output: 3 watts into 600 ohms balanced load makes test loops 100 to 200 miles long. 6 V 600 ohm output for audio tests. W/50 VDC output meter; provision for carrier modulation. Requires 115/230 VAC 50-1000 Hz. 11 x 17 x 15, 46 lbs. Used-reparable \$65 Checked, \$105. MANUAL, partial repro, \$10.00

RETURN POSTAGE  
 GUARANTEED

Bulk Rate  
 U. S. POSTAGE  
 PAID  
 Lima, Ohio  
 Permit No. 74